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ABSTRACT

To test the applicability of systems theory to educational problems, an explanatory construct of "openness" is presented, posited as the crucial variable in determining a system's relation to the environment and therefore the basic property of the individual person-system to be modified by the educational process. Written as a monograph by a professor, tentative construct validation for a Cognitive Openness Scale is provided to demonstrate the utility of generating hypotheses as implications from formal theory. A theoretical overview of the individual and his relations in a community presents a psychological view of man within the conceptual framework of a systems approach. Field tested by means of 240 interviews in a random area sampling, item analysis and analysis of internal consistency reliability were conducted for 65 belief statements in the Cognitive Openness Scale. A second sampling gathered 324 usable Cognitive Openness Scales in addition to Household Survey Schedules as a data base for their validation. Confirmation of the majority of hypotheses about the openness construct by factor and trend analysis substantiates the validity of the Cognitive Openness Scale as an operational measure of cognitive openness. Implications for education are drawn. Extensive resource materials, including maps, are included. (G)

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OCCUPATIONAL EDUCATION IN AREAS OF SOCIAL AND
ECONOMIC TRANSITION: A SYSTEMS APPROACH

Donald W. Drewes

Department of Psychology
North Carolina State University at Raleigh

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North Carolina State University at Raleigh

PREFACE

The history of western thought has produced many conceptions of the nature of man and his society. These conceptions have ranged from the purely deterministic ideas of astrology and divine plans to the completely open notion of free will. Between the extremes lie innumerable theories propounded by sociologists, anthropologists and psychologists which purport to explain the nature of man and his relationship to the society in which he lives. With the passage of time, new ideas and new theories arise which provide further insight into the nature of man, and as the social sciences have become more sophisticated these ideas have also become complex and sophisticated.

In the present paper, Dr. Donald Drewes has attempted not only the testing of some research hypothesis as would be expected in a research report, but also the elaboration of a theoretical framework which provides a conception of man and of man's relationship to his society. The framework is developed out of the relatively young field of systems theory which, even in its brief period of formal existence, has managed to make great contributions in the areas of science and technology. The approach is holistic, and the framework developed by Dr. Drewes is truly impressive in the richness of its possibilities for exploration. The further development and exploration of this and similar constructions may well enhance our understanding of man and his interrelationships.

The Center extends its appreciation to Dr. Drewes for completing this report and to the members of its technical and editorial staffs for their role in the final publication of the manuscript.

John K. Coster
Director

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INTRODUCTION

One prerequisite for the development of a total community approach to education for areas in social and economic transition is the creation of a conceptual tool and the concomitant language that will permit the formalization of concepts to describe the community phenomenon. If we are to speak of transition, we must first be able to describe an entity over time, and to understand change over time one must first be able to comprehend the structure of the entity at a fixed time point. As Gerard (1964) states:

"The recognition or discovery of . . . entities must precede their scientific examination. Such qualitative decisions must always precede quantitative ones, if the latter are to be worthwhile, and the important advances in human thought always involve a shift in the entities of concern. This qualitative recognition of the important systems, which I find helpful to call 'entitation,' is far more important than their measurement. Entitation must precede quantification for only when the right things have been found to measure are measurements worthwhile."

This report, then, is concerned with what Gerard calls entitation--that process of invention of component entities and the specification of their systematic relationships which, when considered collectively, constitute the social entity referred to as a community. The purpose of this section of the report is to outline in broad strokes a general conceptual approach to man and society. Hopefully, this approach will be sufficiently fertile to support an explanatory framework whereby education can be understood in the total community context.

The approach is psychological; that is, man is regarded as the basic element. The fundamental premise is that the understanding of collective man must emanate from a primary understanding of the individual man. To this extent, the approach to community taken here is based on an organic analogy, i.e., a collection of cells interrelated to perform specific functions.

Within the systems framework to be developed in the body of the paper, openness is posited as the crucial variable which determines the system's posture with respect to the environment. As such, openness is the basic property of the person-system that must be modified by the educational process. Thus, the openness of component systems provided a logical choice for operationalization in order to test the applicability of systems theory to educational problems.

Following the development of the theoretical approach, this paper will present and provide tentative construct validation for a Cognitive Openness Scale (COS). The development and construct validation of the COS will also be used to demonstrate the utility of generating hypotheses as implications from formal theory.

It should be admitted at the outset that the theoretical overview lacks a rigorous formulation of relationships. However, the overview does impose a conceptual organization that allows the problem of man and community to be approached in its holistic complexity rather than fractionated into triviality in the quest for scientific rigor.

This report intentionally refrains from describing specific characteristics of the Wilson, N. C. community where this study was carried out, except insofar as such descriptions are relevant to the validation of the COS. Instead, the effort is directed to the development and validation of a crude framework wherein community descriptors can be attributed significance with respect to the educational process within the community.

OVERVIEW

The Systems Approach

Community as a concept, that is, as a phenomenon amenable to scientific inquiry, implies a matrix of interactions among members of a social group whose individual behaviors collectively constitute the behavior of the organized social entity--the social community. The analysis of a community, however, cannot simply consider the sum total of individual behaviors, for to do so would be to ignore the interactional significance of collective behavior. The importance of this idea is reflected in the gestalt maxim: "the whole is greater than the sum of its parts."

The concern with the whole, and with the simultaneous interdependence of its elements, demands an approach much different from the classical scientific methodology. Classical science has depended upon a sequential causality paradigm which requires that causal relationships be deduced by holding all variables constant except the pair of interest. Fortunately, however, contemporary advances in cybernetics, information theory, game theory, decision theory, and communication theory have contributed to the evolution of what might be considered one of the most significant expansions of modern scientific thought--the emergence of the "system" as a viable scientific construct. The idea of the system is not simply a new name designed to lend an air of modernity to research founded on the premises of classical science. On the contrary, modern systems theory actually represents a new philosophy of scientific endeavor. Instead of two, or at most a few, variables carefully controlled in a laboratory situation, the systems approach focuses on a larger sphere of the empirical world. Using this approach, it is possible to consider a large but finite number of variables defining an empirical domain whose time-space magnitude generally precludes analysis by the mechanistic methodology of classical science. Knowledge is obtained through the examination of the organized variables, and interest, therefore, centers upon the more abstract notions of organization rather than on the material substance of component parts. Instead of the classical emphasis on the statics of structure, time-fixed relationships, and linear causality, the systems

approaches emphasizes the dynamics of process, growth, circular causality, feedback, and complex mutual interaction.

The Language of Systems

Just as the philosophy of the systems approach differs from the philosophy of classical science, the terminology also differs. This section of the report will provide an introduction to the systems terminology and set up the definitions which will be used throughout. The most important definition, of course, is that of system, and for the purposes of this report a system will be defined as:

A set of elements so organized as to achieve certain goals or objectives.

An element is simply a part or component of a system. The specification of an element requires that it occupy a unique position in the time-space continuum. That is, no two elements may share the same time and/or space coordinates. The term organization refers to the ordering of elements in space and events in time, and goal is defined as an external object in space, or an event in time, which has positive utility or valence for the system.

Having specified the definition of the system, the complementary notion of environment may now be introduced. Environment is generally defined as the complement of the set of all elements constituting the system. The system is differentiated from its environment through the specification of the boundaries of the system. Since the partitioning of the universal set of elements into system and environment, or set and complementary set, is completely arbitrary, the level of definition of the system depends upon the intent of the scientific analysis. Given the arbitrary nature of system definition and the multitude of levels that might be selected, it is clear that any system may be either divided further into 546 sub-systems, or considered an element in a larger supra-system. This yields the notion of the hierarchical order of systems which is that the elements of any system may themselves be considered as systems of a lower order.

Transactions from the environment that permeate the boundaries of the system are termed inputs. Inputs, therefore, can be regarded as those aspects of the environment that impinge upon the system and provide the linkage between the system and its environment. The behaviors that are emitted by a system are referred to as the outputs of the system. The system acts to convert inputs from the environment into outputs which have consequences for the environment.

An important property of systems is their ability to modify their behavior so as to obtain desired goals; an ability known as feedback. In feedback a system returns part of its output as a subsequent input and corrects its past behavior on the basis of

the difference between the behavior and some desired goal. In this manner, the system acts in response to an input which includes the results of its own previous actions, thereby enabling the system to exhibit the goal-seeking characteristics of simple learning.

The notion of goal-directed behavior in the system-theoretic approach legitimizes the teleological concept of "purpose" which had fallen into scientific disrepute. Purpose in the systems connotation implies that system outputs are directed towards the attainment of recognized objectives. Purposive behavior is thus regarded as being a means towards some specified end. More specifically, purposive activity implies a "tension" created by the desire for an unobtained object or future event, a strategy for the selection of a behavioral sequence that will lead to the realization of the object and/or event, and the behavioral sequence itself.

The fundamental basis of the concept of purpose is that of freedom of choice. In order to exhibit purposive behavior, the system must have a behavioral repertoire with sufficient variety to enable the attainment of a particular goal via alternate pathways. The selection of a given behavioral sequence from a set of alternatives necessitates that the system make decisions according to certain rules or strategies. The system is said to process information in that the way in which information is created, stored, and retrieved determines the manner in which decisions are integrated to affect the conversion from input to output.

Systems which exchange information rather than energy with their surrounding environments are referred to as open or adaptive systems. These systems characteristically possess a high order of complexity of their internal structure. Instead of maintaining a static state of organizational complexity, the system maintains a dynamic feedback relationship with the environment which allows the internal organization of an open system to be modified according to the press of the environment. Closed systems, since they tend toward increasing states of disorder, obey the second law of thermodynamics. Open systems, however, may evolve toward increasing levels of order and organization of structure. Steady state conditions are dynamic in that constancy is maintained by contradirectional changes in organizational complexity. Open systems in interaction with their environments may achieve a steady state independent of their starting conditions; a principle known as equifinality.

Open systems are capable of goal-changing as well as goal-seeking behavior. Whereas goal-seeking feedback is open with respect to the environment, its primary function is that of self-regulation and the maintenance of internal structure within prescribed limits of tolerance. In contrast, goal-changing feedback loops are oriented toward self-direction of the system wherein new goals are established or old goals are modified so as to reduce the mismatch between goal-attainment and the current system structure. Given the capability to modify the internal information processing structure, an open system is capable of higher order learning than that associated with the goal-homing behavior of the simple feedback loop.

The freedom of choice inherent in the equifinality of an adaptive system subjects the system to internal conflict and tension. The richer the possibility of choice, the greater the possibility of conflict as choice of one decision alternative precludes choice of another. The system is linked to the environment through information processing models whose validity can never be determined with absolute certainty. Faith in procedural rules does not preclude doubt about their ultimate verity. Environmental situations which have the potential of creating disturbances within the system are termed stress. Disequilibrium of the system's internal structure resulting from the stress of the environmental situation is defined as strain. An adaptive system is seen as reducing strain by managing the environment so as to maintain the stress within tolerable bounds.

The Person as a Subsystem

The individual human being within the systems framework, may be viewed as complex, self-adapting system whose fundamental purpose is to create an evolving ordered reality from an unordered but orderable environment. The environment is regarded as an amorphous flux having no intrinsic organization or structure aside from that imposed by the interacting system. Reality for the system is the mediated product of a process that transforms the undifferentiated flux of the sensory world into a meaningful hypothetical world of real and exact entities. Meaning is attached to a particular only when the specific particular of the here and now can be assigned a place within the larger systematic relationship provided by the hypothetical world view. Meaning does not reside in external objects and events; it is imparted by the individual in a creative act of judgment.

Man as the basic system knows his world in the sense that he analyzes and synthesizes his experiences into a unified world view, a manifold of causal conditions and effects which makes possible the ordering of the flux of sensory data into a meaningful system of suppositions. These suppositions are termed beliefs. Beliefs as suppositions about the nature of reality are regarded as more or less probable or improbable affirmations of reality depending upon the sufficiency of their theoretical substantiation. They are in essence hypotheses or inferences about the external environment and internal states of the system, hypotheses with varying degrees of tenability depending upon the sufficiency of the evidence needed to make belief probable. The important consideration is that the credibility of belief is established through a process of reality testing.

Lawfulness is the sine qua non of the world view. The security of the existence of any particular rests upon its grounding in a system of universal rules. Objectivity is attributed to particulars only insofar as they are regarded as individual instances of a universal rule. All data are evaluated against the criteria of permanence, logical constancy, and logical necessity. Representations are elevated from illusions or fictions to objective reality only when they are found to be consistent with a set of systematic relationships--a system of causes and effects which serve as the ground against which the particulars are evaluated.

Unity of experience is achieved through analysis and synthesis. Although a logical supreme synthesis is sought--a knowing of the particular only as an instance of a universal law--this synthesis is nowhere accomplished until experience is transformed into a form which can be synthesized into an ordered structure. Before objects can be comprehended in their unity, they must be analyzed in terms of dimensions that have no direct counterpart in the flux of sensory experience. It is only through the identification and subsequent relating of underlying traits, attributes, or basic constructional elements that an order is perceived, a logical foundation or ground is established which makes possible the regrouping of sensory experience into an unequivocal organization of beliefs; a unified world view. To identify requires a differentiation into constituent basic elements, while relating requires a combination. In this sense, reality testing is dialectical. The process always operates both analytically and synthetically in the transformation of objects into their constitutive factors and the subsequent generic regrouping. The "what" of the sensory world is replaced with the "because." Objects do not exist in a peaceful, harmonious co-existence, but in a complex network of conditions and relationships.

Objectivity does not depend upon mere presence or force of being but upon the degree of clarity, lawfulness, and determinacy with which the law of the whole is reflected in the individual occurrence. Truth or falsehood does not depend upon sensory appearance, but upon the logical validity of the underlying lawful structure which enables the essential to be distinguished from the accidental, the variable to be distinguished from the constant. Object objectivity does not reside in the object but is the result of experience which can be dissected into the strata of ground and consequence. Lawfulness is determined according to the principle of sufficient reason which serves to distinguish the transient from the permanent, the accidental and fortuitous from the universally valid. Hence, all elements of information are not accorded the same degree of objectivity since varying degrees of certitude may be attached, depending upon the degree of reasonableness. Truth is ascribed only to those elements of experience which are consistent with the universal logical system, the ground against which experience is validated. Certain experiences are regarded as necessary and fundamental to the very foundation of the system; others "are" only insofar as their occurrence has been experienced. Until they are satisfactorily incorporated into the synthetic unity of the logical whole, they remain as illusions, accidents of experience which are relegated to a special sphere of being.

The real world view consists of differentiated spheres of structured beliefs, each with varying degrees of certitude and determinacy. Logical rank is assigned to these spheres in accord with the principle of sufficient reason, since certitude is relative only to the validity of the universal rules which are never absolute and always subject to revision and modification. These spheres of belief within the real world view correspond to what Vaihinger (1925) called fictions and hypotheses. According to Vaihinger, fictions are mental constructs which are useful in discursive thought but are regarded more as illusory than real and hence to be assigned a dependent and mediate state of objectivity. The constructs Vaihinger called hypotheses are more crucial to the verity of the framework supporting the

conceptual edifice and hence must be verified in order to qualify as "being" in the objective sense. The conditions required for validity to hold determine the degree of universality ascribed to the hypothesis about reality and hence its assignment to various spheres of being.

Beliefs regarding time, space, and number, because they are so fundamental to a universal logical synthesis of experience into a lawful world order, are termed primitive beliefs. They are the logical constants with which the aggregate of impressions is shaped into an ordered real world view. As the structure of beliefs evolves, these primitive beliefs merge into a ground against which the validity of other beliefs are evaluated. As such, the purely suppositional qualities of these beliefs tend to be interpreted in their ideal significance as eternal truths. Beliefs which repeatedly have been established as being in harmony with the lawful schema of reality are attributed factual status. Those beliefs with a lesser degree of supportive evidence are relegated to another dimension of being, a dimension where objectivity is conditional and subject to further experimental confirmation. Evidence need not be directly experienced, however, in order to constitute confirmation of a belief, as is the case whenever information is accepted as evidence on the basis of an outside authority. Here the principle of reality testing is applied to an evaluation of the credibility of the source. Thus, information from secondary sources is acceptable, but not without questioning the nature of the source.

Certain spheres of belief possess a sanctity not contingent upon verification by reality testing. These beliefs are closed to modification from secular empirical experiences. As such, the structure of these beliefs cannot be threatened by new experiences or by criticism since their verity is a matter of faith, independent of logical criteria.

The analytical unit of system activity is the act, a notion expounded by G. M. Mead (1938). Act, as used here, refers to an episode of activity initiated when an existing state of organization is disturbed and terminated when a state of internal structure which reduces the tension resulting from the initial disturbance has been attained. Each act is organized and enacted according to a model, a set of rules for the instantaneous space-time mapping of the external environmental flux into an internal belief structure. Since the specific details of an act depend upon the immediate situation, the model contains specified rules for the determination of the input domain of the mapping operators. That is, a finite sample of the environmental flux attains relevance for a specific act only in accordance with the rules provided by the model governing the act.

Variety is imparted to the sampled environmental flux according to a sensory input coding inherent in the model. The flux is partitioned into temporal-spacial classes and assigned symbolic representation by virtue of class membership. Thus, degree of environmental variety is not an inherent property of the environment but is imparted by the perceiving system in accord with the modular rules pertaining to the sensory mappings.

Information is attributed to sensory inputs from the environment according to a logical structure prescribed by the model governing the act. Through analysis and subsequent regrouping into synthetic units significance is attached to the concretion of symbolic input. In this sense, information is not passively received from an outside source but is imparted by the system in a creative transaction.

The set of alternative behaviors immediately available to the system is also a function of the specific model. System behavior is regarded as an expenditure of energy for the purpose of attaining a goal state which eliminates the discomfort resulting from an original disturbance. A specific behavioral alternative is chosen which is determined to have the maximum likelihood of goal attainment, given the existing knowledge of the environment. The procedures for determining maximum likelihood are in accordance with the logical structure of the model.

Once action is initiated to re-establish system equilibrium, the efficacy of the chosen behavioral output is evaluated according to criteria of permissible deviation provided by the governing model. The consequences of the output for the environment, termed the outcome of the behavior, are evaluated in terms of the contribution to specific goal attainment. Outcome as the result of prior behavior output is again inputted into the system as feedback. The process continues until either the goal is obtained or modified so as to dissipate the existing tension, thereby concluding the act.

In order to cope with the ever-changing environmental press, system models are in a continuous state of evolution. Environmental action of reaction may result in blockages in the on-going action or unexpected behavioral outcomes outside of the domain prescribed by the current model. Positive rather than negative feedback loops in the model may amplify goal deviation, thereby requiring a modification of the model in order to reduce the resultant tension to manageable bounds.

As acts are governed by models, models are governed by theories. Specifically, a theory is a plan, a set of rules for the development, selection, and evolution of a class of models. Whereas models are time-space dependent, applying to the mapping of temporal-spatial samples of environmental flux; theories are independent of spatial-temporal constraints. Hence, a model may be regarded as a temporal-spatial manifestation of a theory. To add to the distinction, models have a function analagous to that of a computer program, whereas theory functions much as a program compiler.

Theories, as opposed to models, dictate the process of reality formation rather than the structure of the formed reality. Ideational, analytical or constructional forms are fabricated and synthesized into a causal network with an inherent lawfulness of its own. Causal connections are created by relational propositions which are the ground rules governing analytical and logical processes directed towards establishing relations

between cause and effect. Theory provides the blueprint for the abstract organization of an idealized world; as an interpretative ground for the real world of the present. The concern is with the formulation of the general universal rather than its particular instances. Since the concern of theory is the organization of an ideational world that transcends the spatial-temporal constraints of immediate experience, the resultant beliefs about the ideal world, termed concepts, tend to resist modification via reality testing. This is not to say that concepts well grounded in theory are closed to experiential modification, but rather that theories once formulated tend to persist and not too deviant outcomes tend to be interpreted as imperfect instances of a general law.

Theories as rules have as their domain a set of symbols, each symbol being a universal class and having the taxonomic characteristics of essentiality, consistency, and sufficiency. The class of universal classes (symbols) constitute an ideational structure, wherein beliefs about the nature of reality evolve as a result of encounters with the system's environment. Symbols attain their ideal significance only within a network of intersymbol relations. Through the media of symbolic manipulation, the present can be extended to the past or extrapolated into the future. Ideal worlds are structured, demolished, and restructured. Alternative plans are created and their implications examined and evaluated in the light of past experiences and expected outcomes. Such ideational activity wherein reality comes into being is called thinking.

Differential certitude of the belief structure is a result of differential spheres of certitude of the generational theories. Theories are ascribed a degree of confidence dependent upon their demonstrated utility. Those theories which yield multiple confirmations are accorded a corresponding degree of sanctity. As confidence increases, doubt in the verity of the theory decreases, thereby diminishing the degree of reality testing. Repeated confirmation leads to immutable theories.

The ideational world is thereby structured according to degrees of certitude. At the core are those immutable theoretic relations that serve as the bedrock for an elaborating structure. More peripheral relations evolve against the foundation ground and coalesce into the supporting structure according to demonstrated utility. In this manner, being as a structured state of reality is in a continuing state of becoming.

Theory building is itself governed by a set of rules for determination of logical and experiential validity, an internal psychologic which specifies a set of ground rules that apply to all theory evolution independent of the content domain of the theory. The degree to which sensory experience is regarded as legitimate evidence in reality testing is determined by rules of permanence which specify the criteria by which the illusory is separated from the real, the transient from the permanent. Beliefs are dependent upon rules for the determination of necessary and sufficient conditions for confirmation. Cause and effect relationships are formulated in accordance with formation rules of the psychologic; essentially a set of rules for rule making. Logical validity of the theoretic structure

is determined in accordance with rules which specify the conditions for consistency.

The constructional edifice whereby a systems "knows" reality rests on a universal ground; a set of suppositions about that which is of ultimate concern. Utility for the system has meaning only in the context of that which is of ultimate concern and hence of ultimate value. Thus, gain as positive utility and cost as negative utility exist only in relation to the ground from which value emanates. Objects or events are attributed status as goals only if their attainment is of concern to the system.

The symbols by which the ultimate is expressed as a set of suppositions, by their nature, contain the potential for conflict with the pure meaning they intend to embrace. Any myth whose mythical character is not recognized runs the risk of idolatry, the elevation of a false ultimate to the state of ultimacy. However, demythologizing is potentially damaging to the world view. Doubts, being damaging to the unity of the order structure, tend to be suppressed by a dogmatic supra-stratum. Existential validity is attributed to external authority whose pronouncements are accepted as an act of faith. Criticism of content is interpreted as a criticism of the source of authority and, as such, is sharply rebuffed by discrediting the qualifications of the criticizer or by branding the criticism a breach of faith.

Environmental Representation

Belief in the existence of material objects and events is an inference drawn from immediate sensory experience and validated according to the rule structure of the governing theory. Description is in terms of symbols which as previously defined correspond to universal classes. If an entity is defined as a class containing a discrete sensory organization in time and/or space, then an entity can be regarded as equivalent to the intersection of all universal classes such that the discrete organization is the only common member of each class. In this manner, an entity can be totally defined by specifying the sequence of symbols corresponding to the intersecting classes.

However, since the intersection may be defined over an infinite number of defining classes, a finite number of classes must be selected as the basis of description. Cause for uncertainty results from the fact that multiple entities may be described by the same sequence of symbols, i.e., the intersection of relevant classes may contain more than one element.

The conceptual structure fabricated from the generational theories determines those particular entities which will be given significance in terms of the intended purpose of activity. Those entities which are the focus of systematic inquiry are termed phenomenon and constitute those occurrences for which explanation is sought. Explanation, in this case, is the application of an analogy of an idealized hypothetical world to the description of the encountered environment.

Middle-sized entities are hierarchically ordered in that sub-elements are organized into larger organizational units according to class relations of proximity, similarity, common fate, and closed surface (Wertheimer, 1938). As a general rule, middle-sized material objects are attributed a degree of objectivity which makes them appear more "real" in that they appear more solid, more hard, have better defined boundaries, are more apt to be multiply confirmed, and are well-suited to identification by a visual system so efficient that its operation belies its mediational basis. Entities whose identification depends upon less direct confirmation are correspondingly endowed with a lesser degree of reality.

Differential action significance is attributed to environmental phenomena according to whether the represented objects are regarded as having the potential for environmental representation and intentionality. Inanimate objects having only the potential of reaction to system initiated action are assigned differential properties and attributes from those objects which have the potential not only to react but also to initiate purposive goal-directed activity mediated by an internal environmental representation. Whereas inanimate objects are attributed static physical properties such as size, shape, weight, etc., properties of animate objects tend to be inferred in terms of process dynamics rather than structural statics. Other persons as environmental objects are described mainly by universal categories such as traits, abilities, intentions, emotions, or motives which, although inferred from action, tend to be descriptive of person-systems rather than their activities.

As the person system knows itself, so it knows others, and as it knows others, so it comes to know itself. That is, the environmental field is polarized into subjective "self" and objective "other." The actions of others are understood in terms of an explanatory structure of descriptive universal classes distilled from the unique experiences of the person-system.

A commonality exists between the self and others, since others, seen as similar in structure and process with like capabilities of intentionality and representationality, are understood by a projection of self-hood to other-selves. The strength of the bond of commonality depends upon the degree to which others are charged with self-hood. The alignment with highly charged others establishes a "we" coalition as opposed to "they," a collection of other-selves either neutral or antithetical in action or intent to self-interest.

As the external environment is objectified and represented, the inner environment of the person-system is also so objectified and represented. It is this representational inner environment that is termed subject-self. The self as subjective object is attributed entity in that it persists over time and is orientated in space. The self as objective object termed the object-self is integrated into the representation of the external environment. As such it is subject to description via the same universal categories as other self-entities in the external environment. Thus, object-self or, more precisely,

attributes of self can be interpreted as facilitative or inhibitive to the attainment of desired goals in the same manner as other-selves or as inanimate objects or events.

The nexus of relationships by which the object-self is imbedded in the person-system's iconic representation of the environment determines the stance of the person-system with respect to the external environment. Since object-self is assigned causality and intentionality, its boundaries are delineated by its influence on the total environment. The more the object-self is seen as acting to control the environment, the more expansive and affective the self. The more passive and acquiescent the self, in the external representation, the more constrictive are the self-boundaries and the greater the degree of delegation of self-determination to external sources.

Object and subject-self bear a direct correspondence to the concepts of "I" and "me" first proposed by Mead (1938). Since the object-self is endowed with causality, it is attributed a potential for action in the external environment. The object-self as actor differs from "I" insofar as Mead conceives of "I" as action rather than as the locus of action. Subject-self as an iconic representation is similar to Mead's conception of "me" as self-image.

Individual-Other Relations

Person-systems a and b are said to interact if and only if a communicates with b and b communicates with a. Communication is considered to be a process by which a message initiated by a person-system (sender) affects a person-system (receiver). Message refers to a set or ensemble of signs created by a sender for the purpose of influencing others. Sign is defined as a unique action or mark which has significance only as a referent to an external object or event.

Theory as a strategy for the generation of a class of models stipulates rules for the formulation of a set C of available courses of action, a set O of possible outcomes, a set P of probabilities of choice for each course of action, a set E of efficiencies of each course of action as instrumentality for each outcome, and finally a set V of values of each outcome. Receipt of message affects a receiver by inducing a change in at least one of the sets C, O, P, E, or V.

Following Ackoff (1957), a message that changes the set P informs; a message that changes the set E instruct; and a message that changes the set V motivates. Any single message may, of course, do any combination of these simultaneously.

Several aspects follow from the definition of communication. First, the communication relation is reflexive in that a person-system may communicate with himself. Second, although a sender may initiate a message with the intent of influencing a certain class of receivers,

the actual receiver may be unintended, as for example when a message is intercepted. Third, the sender and receiver may be widely separated in time and/or space.

The message as initiated by a sender in the communication process is intended to convey to a receiver or class of receivers information about a phenomenological field (sub-organization) of the sender's representational world. As such, the constrained variety of the sender's phenomenological field is mapped by a coding process into a selected ensemble of signs whose structure is relatively isomorphic to the generating field. The coding system consists of a universal ensemble of signs and a grammar for their combination. The selected sample of signs suitably concatenated according to the sign grammar is transmitted in some fashion to the intended receiver(s). The receiver upon receipt of the message decodes it, ideally using the same coding system as the sender, such that the original variety and constraint of the sender's phenomenological field remains relatively invariant.

The degree of isomorphism between the phenomenological field of the sender and that field inferred from the message by the receiver is termed communication fidelity. As defined, fidelity depends upon mutually shared rules for mapping from fields of the ideal world to the sign ensemble and mutually shared rules for manipulating the sign code so as to maintain invariance in the relational structure of the field.

Thus, communication fidelity is a function of the extent to which person-systems share a common set of rules. A common language system requires a structural isomorphism between systems; that is, there must exist a correspondence between the sign ensemble of the sender's and receiver's language system such that constraints on the variety of the sender's ensemble remain invariant under the receiver's translation. Not only must the language system be held in common but also the mapping by which signs are coordinated with the symbols of the phenomenological field. Thus, person-systems capable of communicating the structure of their phenomenological field with relatively high fidelity are those sender-systems which by virtue of isomorphic rule structures participate in the self-hood of the receiver.

Low fidelity communication occurs whenever the receiver is affected by the message but the constrained variety in the sender's field does not remain invariant under transmission and subsequent decoding by the receiver. The message may be decoded and assimilated into the receiver's environmental representation as factual evidence about the sender as object or as illusion which conveys no information about the state of the sender or his intentions.

The information potential of the message depends upon the relational network embedding the sender in the receiver's environmental field. Given the existence of a prior theory about the sender, the communication act is interpreted and given explanatory significance in accordance with a model generated to account for the actions of the person-object in the observed environmental situation. In the absence of prior theory, a message may

fail to induce an effect on the receiver, fail to communicate, or may create uncertainty in the receiver as to the state or intent of the sender.

Interaction as process exists when the receiver in turn initiates a message which affects the original sender. The person-systems are thus causally linked in that the representational field of each person is dependent upon communication feedback as to the effect of his message on the other. Since each person intends to communicate the structure of a representational field via constrained variety in an ensemble of signs so as to produce an effect on the other, the interaction process represents a mutual striving to create patterned relationships that are congruent with existing theories concerning self and other. As such, the locus of change and stability in each person-system is not in the intrapersonal structure per se, but in the interaction process itself.

Individual-Others Relations

An individual person-system interacts with others so as to create an intersystem pattern of activity instrumental in achieving desired goals. The mutual desirability of the goals, plus the recognition that the goals cannot be achieved by unilateral action, necessitates the organization of joint efforts for mutual gain. Since the locus of activity often is separated in time and place, division of labor is mandatory. The activity required for goal attainment is partitioned into activity classes termed tasks which are related by specific precedence rules of time and place. The tasks are allocated to the individual person-systems in such a manner that the organization of person-systems corresponds to the task organization. An organization of person-systems isomorphic to a task system is said to be a group.

Tasks and their interrelations impose a constraint on the action potential of those assigned to the task. The collection of abstracted categories used to describe the prerequisite characteristics of an idealized task performer is defined to constitute a position. As such, position denotes a class of person-systems which by definition have the potential for action required by the task system. Person, as differentiated from person-system as entity, refers to a person-system identified only to the extent of the position categories. Person, then, is related to task only through the notion of position.

Following Oeser and Harary (1962), a collection of persons is denoted H , a collection of positions is denoted P , and a set of tasks is denoted I . The organizational hierarchy of the group is determined by a power relation R_1 defined on the position set P . The rules for assignment of persons to positions specify a person-assignment relation R_2 defined on the set $H \times P$. Tasks are assigned to positions according to a task allocation relation R_3 defined on the set $I \times P$.

The role of position p_i is defined as the set R_{p_i} of all positions $p_j \in P$ such that p_j is either immediately supraordinate

or subordinate to p_i and t_k is assigned to position p_j ; i.e.,

$$R_{pi} = \{p_j, t_k \setminus p_i \text{ } R_1 \text{ } p_j \text{ or } p_j \text{ } R_1 \text{ } p_i \text{ and } t_k \text{ } R_3 \text{ } p_i\}.$$

According to the definition, role is assigned to position rather than person. Person in the group context is specified by position and is related to other persons in accordance with the rules interrelating positions. Thus, role is assigned to persons according to the assignment relation R_2 . Since each person corresponds to a unique position and conversely each position corresponds to a unique person, the assignment relation $R_2^1: P \rightarrow H$ is a one-to-one functional relation which maps the position set P into the person set H .

Let S be a set of rules and R^0 be a relation defined on S such that $R_{pi} R^0 R_{pj}$ if and only if $R_{pi} \cap R_{pj} \neq \emptyset$, that is the roles of position p_i and p_j denoted R_{pi} and R_{pj} , respectively, as related if and only if they share at least one supraordinate or subordinate position and/or task in common. The sequence consisting of the set of rules S and the relation R^0 defined on S denoted $\langle S, R \rangle$ is termed an interpositional role system.

Persons are organized according to a relation R^1 on the person set H . Roles are assumed to be assigned to positions in a one-to-one correspondence. Since positions are assigned to persons according to a one-to-one assignment relation R_2^{-1} , there exists a one-to-one function $F: S \rightarrow H$ that maps the role set S into the person set H . The functional relation F assigns a unique person $h_i \in H$ to each role $R_{pi} \in S$ in such a manner that

$$h_i R^1 h_j \text{ if } R_{pi} R^0 R_{pj}.$$

By definition, the interpersonal role system defined as the sequence $\langle H, R \rangle$ is said to be isomorphic to the interpositional role system $\langle S, R^0 \rangle$. The implication is that the constraints of the role ensemble are mirrored in the person ensemble and thus condition the variety of interpersonal relationships.

The social context or situation is defined as the set R of all relations involved in role determination and role structure. Each person-system is embodied in a situational context of his own creation. Other person-systems are attributed personness according to their assigned role in the total context. Role assignment provides the basis for hypothesis formation regarding the predicted actions of others in a given context. These hypotheses, termed expectations, allow the person-system to anticipate the action sequence of others and to interrelate actions of others to self, thereby reducing environmental stress and its consequent system strain.

The efficacy of a structural role system depends upon its utility in the prediction and control of the actions of others. The validity of roles as prescriptive and proscriptive rules depends upon the congruence between the expected outcome of task performance and the actual outcome of task performance. Role structure as a theory of social action and inter-

action tends to resist modification via reality testing in that not too deviant outcomes are interpreted as noisy instances of a universal relational system.

Depending upon the contextual richness of a person-system's representational world, each person-system occupies a number of roles concurrently. While each role may serve to reduce system strain, multiple roles may interact so as to require inconsistent or conflicting modes of action. Participation in a multiplicity of group roles some with widely divergent goals may result in a proliferation of object person-selves, each corresponding to a differential role context with a corresponding loss of composite self-identity. Given the premise that any open system struggles to maintain an integral self-organization against the tendency for disintegration, this fragmentation of the self is not without cost.

The social world of an individual person-system is defined as the set of context specific interpersonal and interpositional role structures and the relations defined on that set. As the role structures coalesce, the conceptual role edifice becomes more removed from experiential verification. Whereas the personification of a person-system in small groups is mediated in part by considerations other than simply role position, indirect contact with others removed in time and space necessitates personification by positional role. Simplistic statements of the goals of large, amorphous, organizational structures result in broad task and positional specification, and the consequent lack of variety produces role stereotypes which limit the assignment alternatives of personness to person-systems identified with the organization.

This emphasis on role structure is not intended to imply a permanence of structure or even the seeking of relatively stable equilibrium states. Role structures as theories provide a generational framework for shaping social reality wherein the self is continually evaluated in dynamic interaction with others. Social structure is created and modified according to the process of role interaction, wherein self and other roles are forged by reciprocal transaction. Roles as phenomenological fields are communicated to others and modified so as to obtain successful prediction of the relevant actions of others and to maintain a self-role that is congruent with the orientation of others. In the sense that individual person-systems are striving to actualize their roles, they are engaged in a process of role making rather than role taking. Each person-system creates an idealized, albeit vague, role in a given context that maximally complements the unique goals and purposes of the person-system. However, role implementation is obstructed by other purposive person-systems attempting to implement their idealized roles. As a means of reducing strain caused by goal blockages, roles are modified according to a bargaining process. Those person-systems whose goals and purposes are relatively insulated from actions and intent of others are in a favored bargaining position. Those person-systems not so well insulated modify their role to adjust to the communicated roles of others yet strive to expand their role by a continuing challenge of the roles of others.

Individual-Society Relations

A society is characterized by the regulation of the actions of person-systems, and it is this regulation which serves to differentiate societies from simple human aggregations. Society as a complex adaptive system is coterminous with constraint on the structure and process of the component person-systems. The viability of society as a system depends upon a commonly shared ground of ultimate concern. A mutuality of ground generates a value consensus which determines the importance and significance of social activities. It is this common value conviction that provides the guidelines for social activity and serves to constrain not only the structure of environmental representation but also the process.

Social control thus emanates from jointly held values which specify the coordinated activities which must be performed. Social norms are consensus imperatives since they constitute rules which, by value consensus, are determined imperative for goal attainment. The power of any social control depends upon the extent to which the social control reflects a social norm.

Social norms as rules (relations) pertaining to the assignment of persons to positions, the relation between positions, the allocation of tasks to positions, the relation between roles, and the assignment of persons to roles tend to be perpetuated as a matter of faith. That is, those rules which by virtue of past experience have demonstrated their utility are accepted as valid and sanctified by elevation to the status of custom. Customary action engendered from a common value ground serves as another instance supporting the efficacy of the value and hence re-enforces the common value ground in a circular process.

Custom is perpetuated over time as tradition, which is defined as inherited theories of action. Tradition provides a communication link with the past, a justification of rules in terms of prior utility. Theories are transmitted to the person-system via the educational process whose purpose is the inculcation of theories which spring from common values. Actions governed by inherited theory tend to be returned as positive feedback and serve to re-enforce further the value ground generating the actions.

Ground, as a set of suppositions about that of ultimate concern, is a symbolic structure. Symbols as organs of reality and the relations defined on the symbol set constitutes a symbolic language wherein the universal ground is expressed. Symbols as such cannot be fully created nor destroyed as their significance is defined in the collective context of group. Symbols are invented to express the scope and intensity of collective experience and die when they no longer possess that capability.

The symbolic language, wherein the ground of ultimate concern is woven, is communicated to component person-systems of a society by the trinity of verbal language, art, and myth. Language as a set of signs and associated grammar provides a common code, a means for communication of constrained variety of the collective experience, to the individual person-system. Art as a non-discursive avenue for the creative expression of concern augments language as a means of perpetuating a set of common symbols. Myth as communicated stories regarding divine-human encounter and ritual wherein the myth is enacted sustain the vitality of faith necessary for the continuation of collective endeavor.

Community

A community is defined here as a geographically delineated set of people P , a set of positions O , a set of tasks T , a set of roles S and a sequence of consensus relations R_i defined on the aforementioned sets. More formally, community is defined as the relational system:

$$\langle P, O, T, S; R_1, R_2, \dots \rangle$$

Community as a complex adaptive system implies organization for common purposes forged from mutually shared value fields. The attainment of goals requires that goal-directed activity be partitioned into tasks such that each task fulfills a certain function. Community functions can be roughly classified as (1) educational, (2) religious, (3) economic, (4) political, (5) familial, and (6) welfare.

A community is organized according to the principle of functional allocation. That is, subsystems exist within the community which are assigned responsibility for a set of allocated functions. The interpositional role system corresponding to a community subsystem is termed a community institution. Accordingly, an institution is an organization of roles having some educational, religious, economic, political, familial, or welfare purpose.

Rather than a monolithic entity, a community consists of a dynamic matrix of component person-systems linked by multitudinous communication nets to form a variety of interaction clusters. The interaction process molds intrapersonal role structure within the framework of the institutional role structure. To the degree that the variety of role interpretation is constrained by formal social organization, social control is effective in maintaining the stability of community structure.

Community structure at any point in time represents a balance between external and internal forces. The activity of other systems embedded in the environment produces a constant stream of events which alter the conditions to which a community as a system must respond. These environmental disturbances stress the community and produce corresponding internal strain which must be maintained within tolerances lest the organizational fabric disintegrate.

Viability of the community over time depends upon its ability to restructure itself so as to control the ever present tensions created by changing environmental conditions and internal configurations. Symbols become transmuted in the enculturation process and modified by conditions within the larger societal context within which the community is embedded. Established theories of action lose their utility when evaluated against a changing value ground and are consequently modified. Closer linkage with other systems in the larger sociocultural supra-system serves to dilute the cohesiveness of a common symbolic language by introducing greater variety into the symbolic repertoire. Expanding value systems create demands that must be accommodated within the range of allowable system variety. And, finally, differential degrees of role consensus yield an ever present source of uncertainty and conflict.

External and internal pressures for system change are counteracted by a resistance to change, a reluctance to substitute tried and tested action ordering rules for those of unknown efficacy. Specifically, the community is assumed to be regulated by a process whereby community action is adjusted so as to maintain the social institutions, and conversely social institutions are modified so as to produce desired social action. The purpose of a regulation process is to channel the activities of component person-systems to maintain system continuity without generating sufficient conflict to disrupt the system.

Regulation of the community system resides jointly in the political and economic institutions. Power, defined as the ability to influence, is assigned to positions and is transferred to persons according to the formal position-person assignment rules. The consensus role corresponding to position provides the framework which shapes the interaction of role, person and others. The power of an individual person-system is a weighted sum of the power ascribed to all positions to which the person-system has been assigned.

The viability of the community system is endangered when the regulatory process fails to provide the direction required for adaptive response to stress. A regulatory mechanism that emphasizes conformity as the primary means of maintaining social organization is not in a position to utilize the creative potential of deviance as a means of enhancing its chance for survival. The essential requirement is that the regulatory process be capable of producing both deviation-reducing as well as deviation-inducing feedback loops if social control is to be more than mere maintenance of fixed institutions by groupings of vested interests.

OPENNESS - AN EXPLANATORY CONSTRUCT

Within the systems framework outlined in the preceding section, man is presented as actively engaged in the creation, maintenance, and recreation of structures of order within a matrix of role interaction. Strategies for action-interaction are seen as being forged by a dynamic process that involves appraisal, choice, decision, and evaluation. Change, which is experienced as disturbance in the amorphous flux, requires that man continually update the structure of his mediated reality so that he can establish significance for goal attainment. Given the axioms that structure once formed tends to resist modification and that change is potentially threatening to the existing order, change is seen as stress-producing. Energy mobilized to meet the threat creates tension which man seeks to reduce within acceptable bounds by appropriate action. In the context of the previous section, life is a sequence of on-going acts.

In the language of system theory, man is seen as an open, complex person-system that adapts to change by deviation from past modes of action. Openness, then, is a system property or attribute that characterizes an individual person-system in that person-systems can be classified according to the degree of their openness. Conversely, person-systems can also be classified according to degree of closedness, which is defined as the complement of openness.

Characterization of Closed Systems

As the antithesis of an open system, a closed system is characterized by a nonexchange of energy with the environment. Closed systems move toward equilibrium conditions determined by initial starting states rather than evolving toward increasing differentiation of structure. Closed systems when displaced from equilibrium seek to re-establish that equilibrium in an effort to maintain stability. They obey the second law of thermodynamics in that organization progressively dissipates to an equilibrium condition of maximum homogeneity of structure.

Systems such as simple feedback regulators may be externally open with respect to energy transactions with the environment but closed with respect to the modification of internal structure. That is, even though environmental inputs are modified by the internal structure to produce outputs which interact with the environment, the internal rule structure does not change as a function of environmental interaction. Such self-regulating systems are internally closed, since they are geared to maintenance of their internal rule structure.

In the context of this report, "closed", as an attribute of person-systems, refers to the degree to which internal structure is not amenable to modification via interchange with external and internal system environment. Closed person-systems "know" reality via mediated theories accepted more by faith than by reality testing. As such, faith in external authority

rather than reasonableness, necessity, and sufficiency become the criteria for existential validity. Simplistic explanations for phenomena reflect an underlying homogeneity of an idealized world view. Rules of entity emphasize the unity of structure wherein objects are understood more by the uniqueness of the presence and essence of their being than by the degree of clarity, lawfulness, and determinancy with which the law of the whole is reflected in the individual occurrence. Reality is assumed to be given more by immediate experience than mediated by logical constructs governed by utility.

The closed person-system achieves its unity of experience primarily by means of synthesis rather than analysis. Causal connections are not so apt to be created by analytical and logical processes directed toward establishing relations between specific causes and specific effects. Rather, a causal nexus is sought within the totality where there is little differentiation between the objective perception and subjective feeling. Almost anything can cause everything. Mere spatial or temporal contiguity is sufficient grounds for the attribution of cause. The closed person-system tends to postulate a cause for all events, in fact insists on a cause for all events. Causation may even be applied to a unique event not in the sense of explaining the specific event as an imperfect instance of a general law, but rather as a rationalization, a justification of events in terms of the demonic, or divine will and purpose.

Thus, for the closed person-system, there are fewer ideational analytical forms which constitute an objective world determined by law. Reality tends to be smelted down by synthesis into concrete unifying images. Things which "belong" together either spatially or temporally lose their individuality in the totality of an informational concretion. The part is the whole and the whole is the part, since each part contains the essence of the whole. To know the part is to know the whole. Similarly, to know the element is to know the class, since the class is not an ideal universal which determines the particular member, but is immediately present and acting in each particular. Since in the closed view an attribute is simply the essence of a thing seen from another angle, almost any similarity of sensory impression is sufficient to classify objects into a common mythical genus. The taxonomic criterion is more one of perceptible similarity and as such there is no distinction drawn between essential and non-essential, consistent or inconsistent, sufficiency or insufficiency. Every perceived similarity is an expression of the essence, a real force in a world of specific representations.

The relatively closed system seeking to maintain an existing equilibrium structure strives to perpetuate theories of action that have been demonstrated to be appropriate means to a given end. Tradition is valued as a prescription for action that both is supported by and supports the value precepts communicated by language, art, and myth. Experimentation with unorthodox theories and modes of action is feared for it could alter the environment to the extent that the existing structure will no longer suffice to control the resulting stress. Deviation in

general is resisted because the variety needed to map a changing environment requires transformation of the internal rule structure and modification of goals so as to incorporate the environmental disturbances. As a means of coping with change, the closed system either seeks to insulate itself from environmental shock or attempts to modify the environment so that exchanges are no longer stressful.

Since to extend, correct, and revise the existing internal rule structure requires deviation, the closed person-system readily conforms to consensus-imperatives which mold the internal structure. Ritual is important in that it sustains the vitality of myth and insures longevity of the constituent value symbols. Since doubts about the ultimacy of the ultimate concern are potentially damaging to the unity of the closed system, these doubts are suppressed by a suprastratum of ethical and moralistic dogma which sanctifies the "ought to be" as the ultimate law.

The implication of a society of closed component person-systems is obvious. Social institutions under a mandate of conformity lose their vitality and eventually collapse under the crushing weight of inertia. Adaptation to external threat is minimal and painfully slow, having to overcome the accumulated reinforcement of multiple confirmations of the efficacy of established social norms.

Education and Openness

Education provides the institutionalized procedures for shaping the process by which individuals structure their mediated reality. Emphasis on maintenance of structure rather than on the destruction and restructuring of modes of action deprives the individual person-system and ultimately society of the capacity for innovative and creative response to change. It is the function and responsibility of education to provide the transformational rules required to create a variety of alternative structures wherein the conflicts and uncertainties of interpersonal transactions can be mutually resolved.

Process rather than structure orientation requires that education be concerned with relational schema rather than contextual structure. The strategy wherein action is planned, initiated, controlled, and evaluated is of greater concern than the fact that behavioral acts follow environmental change in a temporal sequence. Echoing Belth's (1965) imperative, if education is to become a legitimate discipline, its responsibility must be the communication of strategies for the creation of meaning forged from the constrained interaction between person-systems.

CHARACTERIZATION OF THE COGNITIVE SCALE

Openness as a system variable allows the analysis to focus on the process wherein structure comes into being, dissolves, and is recreated over time. The assignment of a person-system to a class whose members are equivalent with respect to openness but not necessarily with respect to constituent structure bypasses the virtually insurmountable problem of analyzing the infinite variety of the structural content. Ideally, to know the rules whereby structure is created and changed is to know the action whereby the system responds to environmental disturbances.

System openness when applied to individual person-systems is termed cognitive openness. To be empirically useful, the conceptual variable must be operationalized to allow empirical validation of the concept. It should be emphasized, however, that any scale developed is an empirical convenience and does not necessarily exhaust the ideational meaning of openness as a construct.

Development of the Cognitive Openness Scale (COS)

The basic assumptions in the development of the COS is that openness as a system variable is reflected in the current belief structure of a person-system and, consequently, can be inferred from a sample of system beliefs. A pool of 356 belief statements thought to pertain to various facets of the openness construct was developed. The statements were so arranged that a respondent could indicate the direction of his belief by choosing either to agree or disagree with the statement and the strength of his belief by marking his position on a 10-point intensity scale. Disagreement with a belief statement was interpreted as a belief in the negation of the belief statement. A sample statement is presented in Figure 1.

The laws of this country are fair to everyone.

- A. AGREE
- B. DISAGREE

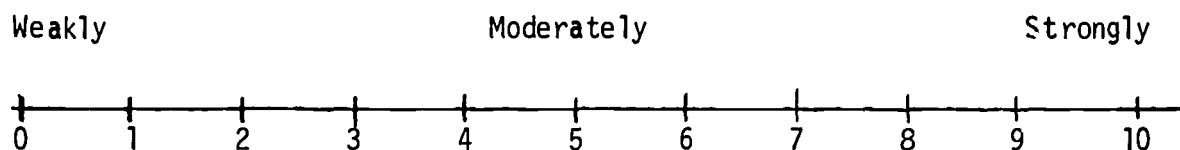


Figure 1
Sample scale item

All belief statements were so worded that agreement signified closedness. The convenience of scoring standardization was felt to outweigh the risk of possible bias.

Four belief statements were presented on a standard 8 1/2 X 11 format, thereby requiring an 89-page item booklet. As a control for possible order effects, booklets were randomly collated. The item booklet and instructions constituted the preliminary COS, which was administered to a random sample of the residents of Wilson County, N. C.

Sampling Plan

For the purpose of COS development, it was necessary to obtain a representative sample of the adult population of Wilson County, N. C., subject to the following constraints: (1) the sample should consist of no more than 300 respondents; (2) each respondent should be a unique head-of-household or spouse of same, but not both, a county resident (residing within the boundaries), an adult (18 years of age or older); and (3) the sample should reflect the characteristics and distribution of the county population in terms of the factors of location of residence (urban, rural place, open country), race, (60% white, 40% Negro), and sex (50% male, 50% female).

An "area" sampling plan was developed which incorporated the defined conditions of constraint. The basic area sampling plan was adapted from Monroe and Finkner (1959) as described in their book, Handbook of Area Sampling. This sampling plan was used as a guide for the following reasons: (1) these authors offered a detailed and illustrated text which lists the definitions and procedures necessary to construct an area sampling plan; (2) these materials were adaptable to all anticipated sampling needs of the project; (3) the basic plan would permit use of census data previously acquired; and (4) common source material (e.g., telephone listings, residence addresses, utilities listings, etc.) necessary for other sampling plans were either not available and/or not adaptable.

Area sampling is a rational process by which a large geographic area is successively subdivided into increasingly smaller, well-defined land units until a unit size is reached that may be unambiguously defined and identified in the field. This elemental unit is called a sampling unit (SU), and each SU is exactly like any other in terms of some defined characteristic(s) such as number of houses contained within, number of farms, acreage in wheat, etc. The total group of sampling units within the large geographic area constitutes the set of elements necessary for a probability sampling.

In large geographic areas it is often useful first to stratify the area according to some criterion, then to subdivide the strata into sampling units so that a proportional probability sampling within the strata is possible. Monroe and Finkner (op. cit., p. 4) suggest the following three strata.

(1) URBAN ZONE - consisting of urban places plus the urbanized areas defined in the 1950 Census. An urban place is defined as an incorporated place of 2,500 or more inhabitants. [In Wilson County, N. C., only the city of Wilson meets this criterion.]

(2) RURAL PLACE ZONE - consisting of all incorporated places less than 2,500 in population and unincorporated places of 1,000 to 2,500 in population as designated by the Census. [In Wilson County, N. C., this zone is comprised of the incorporated places of Stantonsburg, Elm City, Lucama, Saratoga, Black Creek, Sims, and the section of Sharpsburg in Wilson County, and no other.]

(3) OPEN COUNTRY ZONE - consisting of all residual area not defined as Urban or Rural Place. [In Wilson County, N. C., this consists of all area within the county boundaries, but outside of all corporate boundaries mentioned above as Urban or Rural Place zones.]

The defining characteristic of the sampling units was the number of "occupied dwelling units" (ODU's), or, more accurately, the "indicated number of dwelling units" (INOD's). An ODU is defined as a group of rooms or a single room occupied or intended for occupancy as separate living quarters by a family or other groups of persons living together, or by a person living alone. The INOD are those dwelling units listed as occupied or existing for occupancy by a secondary source such as a map or phone book, but which, at any given time, may not be occupied. Monroe and Finkner also discuss dwelling units such as living quarters in a business or other nonresidential establishment, trailers, boats, and railroad maintenance crew-cars, but in this study only houses, apartments, boarding houses, and fraternities were viewed as dwelling units, the location or occupancy of the others being too difficult to ascertain.

Materials and Their Preparation

The successful development of any area sampling plan primarily depends on obtaining: (1) up-to-date, accurate cultural maps of the geographic area in question, and (2) up-to-date, accurate information concerning the defining characteristic(s) of the proposed sampling units. Appendix I describes and contains examples of all maps used in the project. It proved possible to obtain reasonably accurate information concerning the residential characteristics of all of Wilson County, N. C. through use of these maps. In no case was the information less recent than three years old.

Step One. Preparation of the County Master Map (Appendix I.a.)

As suggested by Monroe and Finkner (op. cit. p. 6), the initial step in the preparation of map materials was to delineate the area strata in terms

of map characteristics. On the County Master Map it was relatively easy to do this because the Urban Zone and the Rural Places were contained in map insets which, in turn, were shown in enlargement on the Enlarged Municipal and Suburban Supplement Map (Appendix I.h.).

The Urban Zone stratum was defined as all the area within the 1966 corporate boundary of Wilson, N. C. This boundary coincided with that shown for the city of Wilson on the County Master Map, so no alterations were necessary.

The Rural Place Zone stratum was defined as all area within the County Master Map insets of the incorporated places of Stantonsburg, Elm City, Lucama, Saratoga, Black Creek, Sims, and the section of Sharpsburg in Wilson County. These inset boundaries, rather than the actual corporate limits of these Rural Places, were used because they were easy to identify on the County Master Map. The Enlarged Municipal and Suburban Supplement Map showed the culture that was contained within these insets with the exception of the culture within the corporate limits. This lack of information concerning the culture within the corporate limits of these Rural Places was a problem which required some field work to resolve. (See Preparation of Rural Place Maps).

With the delineation of the Urban Zone and the Rural Place Zone strata in terms of map characteristics, it was possible to define the Open Country Zone stratum as all the area within the county boundary of Wilson County excluding the area defined as either the Urban Zone or the Rural Place Zone.

In dealing with a large geographic area such as the Open Country Zone it was desirable to divide the area into smaller, more manageable land units for the purpose of counting and recording the indicated number of dwelling units (INOD). Since the INOD was the defining characteristic of the sampling units (SU's) in this study, the area sampling plan developed here depended upon an accurate count of the INOD.

The initial land areas into which the Open Country Zone of Wilson County was divided were termed "divisions". On the County Master Map it was evident that the city of Wilson was located approximately in the center of Wilson County. All major transcounty highways and railroads came together in the city of Wilson. Through use of these highways and railroads as the boundaries for the divisions, it was possible to unambiguously define eight roughly wedge-shaped divisions which included all of the Open Country Zone. On the County Master Map the division boundaries were drawn in red and the divisions were labeled clockwise 1 through 8 inclusive.

Each division was then subdivided into five "sections" (A through E inclusive), working inward from the county boundary within each division. Highways within each division served as section boundaries with the exception of the boundary for all E sections. The section labeled E in every division included only the area within the division boundaries that was between the corporate limits of the city of Wilson and the line designating the map inset of the city of Wilson on the County Master Map. The section boundaries and labels were drawn in blue within each division on the County Master Map.

Each section, with the exception of E, in every division was further subdivided into "blocks." A block within a section was a land unit with boundaries that could be unambiguously defined by highways or railroads within that section. The number of blocks in a section was a function of the highway-railroad system encompassed by that section. The range of blocks-within-sections was from 1 to 13. All E sections were considered as containing one block each with block boundaries coinciding with the section boundaries. All blocks were numbered in green on the County Master Map.

After all block boundaries were established, the INOD in each block were counted and recorded in red alongside the block number on the County Master Map. The INOD of the E sections were obtained, however, from a count of the INOD on the City Master Map (Appendix I.b.) because the County Master Map did not show the dwelling unit culture of the area within the Wilson inset. This count entailed transferring the inset boundaries and the division boundaries to the City Master Map and counting the INOD within each division between the corporate boundary of the city of Wilson and the inset boundary (i.e., the E section of each division). These E section INOD counts were recorded in red on the County Master Map.

Appendix II, Table VI shows the INOD totals by blocks, sections, and divisions as taken from the County Master Map. The accuracy of this count was dependent upon the accuracy of the County Master Map.

One known deficiency of the County Master Map was that it did not show off-road culture. The difference between the INOD and the actual ODU's was not possible to estimate. It was assumed, however, that because the Open Country Zone of Wilson County was largely devoted to agriculture that the residents of this area would most likely build their residences near the roads and use the off-road land for farming. A great difference between INOD and actual ODU's was considered improbable.

A second deficiency of the County Master Map was that an indicated dwelling unit did not guarantee an occupied dwelling unit. In a few cases during the field work for Project II, interviewers were directed to vacant houses or to dwelling units which had been demolished since the County Master Map had been drawn. Procedures described in the Field Work section below minimized the effect of this deficiency.

Step Two. Preparation of the City Master Map (Appendix I.b.)

In the initial stages of preparing the area sampling plan it was believed that the use of the 1960 Census statistics would be advantageous. To maximize the use of Census data, it was decided that the first subdivision of the area within the corporate limits of Wilson, N. C. be made by following the 1960 Census Enumeration District pattern. An Enumeration District Map of Wilson, N. C. (Appendix I.f.) was obtained. The boundaries of the 1960 Enumeration Districts were drawn and labeled on the City Master Map. This produced the following 23 districts: 7N, 7P, 8, 9N, 9P, 10, 11, 12, 13, 14, 15, 16, 17N, 18, 19, 20, 21, 22, 23, 24, 25N, 25P, and 26. Four

additional areas (i.e., 28S, 29S, 30S, and 31S) were designated as "special" districts. These special districts were areas that had been brought within the corporate limits of Wilson since 1960.

Each district was further subdivided into "blocks." In most cases a block was a land unit unambiguously bounded by four city streets. There were a few blocks which were bounded partly by railroads, creeks, or the corporate limits of Wilson. As was the case in the preparation of the County Master Map, the criterion for boundary establishment was the use of those map features which could be readily identified in the field.

After the establishment of the district and block boundaries, a count was taken of the INOD by blocks within districts. Appendix II, Table V lists by district and block the results of this count. Note that on this table, the INOD are regarded as ODU.

Step Three. Preparation of the Rural Place Maps (Appendix I.c.)

A search of several possible sources revealed that no cultural maps existed for the seven incorporated places comprising the Rural Place Zone of Wilson County, N. C. While the Enlarged Municipal and Suburban Supplement Map (Appendix I.h.) did show the culture lying between the map inset and the corporate boundary of each incorporated place, it did not show the culture within these corporate boundaries with respect to dwelling units.

Because of the proximity of Wilson County to the Project II headquarters in Raleigh, it was feasible to undertake a field survey of these incorporated places for the purpose of mapping their roadways, streets, and dwelling unit characteristics. One staff member drove through each incorporated place; the other would record dwelling unit locations and type (e.g., single-family unit, duplex, apartment unit, etc.) on freehand maps by visual inspection. After each trip these rough drawings were redone in color. The guiding criterion for drawing each of these maps was that, given one of these maps, a person unfamiliar with the incorporated place could locate in the field any dwelling unit shown on the map.

These maps were not used to count INOD of the Rural Place Zone (see Use of the Materials). Time and economic considerations precluded recording every one of the dwelling units in any of the incorporated places of the Rural Place Zone. Thus, while each Rural Place map shows a large portion of the dwelling units of a particular incorporated place, none show absolutely every dwelling unit.

Use of the Materials

The defining characteristic of the sampling units used was the expected number of occupied dwelling units (ODU's) per area sampling unit (SU). Monroe and Finkner (op. cit., p. 14) pointed out that in general population surveys the size of a sampling unit should be between three and six occupied dwelling units.

As summarized in Table I, Appendix II, the number of ODU's in Wilson County, N. C. by stratum was found to be:

Urban Zone -----	8,686
Rural Place Zone -----	808
Open Country Zone -----	<u>5,805</u>
Total	15,299

It was necessary to determine a sampling rate which would allow contact with 300 respondents on a basis of one respondent per ODU (i.e., either the head-of-household or mate, but not both, from any given ODU). A sampling rate of 1 in 50 ODU's, for example would have yielded approximately 306 ODU's ($15,299 \div 50$) or slightly over 76 SU's of expected size 4 ($306 \div 4$).

It was not realistic to expect that every contact would yield an interview. Many factors were anticipated which would affect the success of the interviewers in the field. The length of the interview was one such factor, since it was expected that the average respondent would need at least two hours to fill out the preliminary COS. Another factor was that no compensation was being offered to the respondent for his cooperation. Perhaps the most important factor, as in any door-to-door interviewing, was the ability of the interviewer to persuade the resident to cooperate. It proved difficult to anticipate the over-all rate of cooperation that would be elicited.

These factors led to the decision that a reserve of ODU's should be incorporated into the sampling plan. Initially, it was decided that a sampling rate of 1 in 40 ODU's might be satisfactory. This sampling rate would yield approximately 382 ODU's ($15,299 \div 40$) or slightly over 95 SU's ($382 \div 4$) of expected size 4.

Table I, Appendix II shows how the SU's were allocated to the three strata in Wilson County. The number of SU's in the original allocation was determined by dividing the number of ODU's in each stratum by 4 (i.e., by the expected size of a sampling unit) and rounding the quotients to the nearest integral number. The expected size of the SU's in the original allocation differed slightly from 4.0000 because of this rounding.

The adjusted allocation of SU's to the strata was necessary in order that an integral and proportionate number of SU's could be selected from each stratum. The sampling rate of 1 in 40 allowed the adjusted allocation to be accomplished by rounding the number of SU's in the original allocation to the nearest integral number divisible by 40. In the original allocation for the urban stratum, for example, 2,172 SU's were found. This figure was rounded to 2,160 SU's in the adjusted allocation, the nearest integral number divisible by 40.

Table II, Appendix II shows the required proportional numbers of SU's to be selected in order that the entire sample would conform to a sampling rate of 1 in 40. Thus, 54 SU's had to be selected in the Urban Zone, 5 in the Rural Place Zone, and 36 in the Open Country Zone. This yielded a total

sample of SU's that was proportional by stratum and large enough to allow approximately 300 ODU contacts with a reserve of SU's to serve as a hedge against the possibility of some residents refusing cooperation or in cases where indicated dwelling units were found to be vacant instead of occupied.

Table III, Appendix II shows the entire assignment of SU's to places in Wilson County by stratum and the assignment of serial numbers to these SU's. Tables IV, V, and VI of Appendix II show the specific breakdown of the allocation of SU's and the assignment of their serial numbers to the Enumeration Districts of the City of Wilson, to the Blocks Within the Enumeration Districts, and to the Divisions, Sections, and Blocks Within the Open Country, respectively.

After the assignment of SU's and serial numbers it was possible to draw the sample and to locate the selected SU's. The sample draw was conducted by stratum. Within each stratum each SU had a unique serial number assigned to it. The number of SU's to be drawn from each stratum was known from Table II, Appendix II. For example, 54 SU's had to be drawn from the Urban Zone. The Urban Zone SU serial numbers ran from 0001 to 2160 (Table III, Appendix II). A table of random numbers was used to select 54 different (i.e., sampling without replacement) numbers lying between 0001 and 2160 inclusive. As can be seen in Table III, Appendix II under the column labeled "Urban SU's as Drawn", SU number 554 was the first appropriate number in the table of random numbers used, SU number 1837 was the second, and so on until 54 different numbers were selected.

The same process was used to select 5 different numbers between 001 and 200 inclusive as the selected Rural Place Zone SU's, and 36 different numbers between 0001 and 1440 for the Open Country Zone SU's.

The sample draw of these 95 SU's insured us of a proportional sample by strata. It was hoped that the random draw in each stratum, in which each SU had an essentially equal chance of being selected, would allow a representative sample in terms of the personal characteristics of the adult residents who lived within the sampling units.

The specific location of any given SU required only a few additional steps. Take, for example, SU number 75 in the Open Country Zone. From Table VI, Appendix II, it was evident that SU 75 was within Division I, Section B, Block 3, the area in the Open Country Zone which had been allocated the sampling unit numbers 70 through 85. SU 75 was the sixth SU within Block 3 (i.e., 70, 71, 72, 73, 74, "75,"...85). To locate the exact dwelling units within Block 3 which constituted SU 75 the County Master Map was used. Block 3 of Division I, Section B is as drawn in Figure 2.

A consistent rule was followed in locating any SU on any map. The rule was that the first ODU of the first SU in any given Block was that ODU which was nearest the extreme northwest corner of the Block. ODU's were then grouped by fours going clockwise within the Block to form the consecutive SU's contained in that Block. SU 75 was the sixth SU in Block 3, so starting with the ODU occupying the extreme northwest corner of Block 3,

six SU's of four ODU each were sketched on the map. The sixth SU, SU 75, was colored in red and labeled for further reference.

Following this same procedure, every SU in the Open Country portion of the sample was located as to specific dwelling units, marked, and labeled. The Urban SU's were located by Enumeration District and Block from Table V, Appendix II, and were drawn and labeled on the City Master Map. The Rural Place SU's were located by incorporated place from Table III, Appendix II. For each Rural Place SU, the specific ODU's which comprised it were found on the handdrawn map of the appropriate incorporated place, marked, and labeled. This was a tedious, interactive process, but it was considerably less complex than trying to draw and label all 3,800 SU's to find the 95 selected ones.

It was at this point that certain of the earlier decisions began to appear less than optimal. The expected size of an SU was 4 ODU's. This decision and the 1 in 40 sampling rate had created a sample of 95 SU's. The goal of the survey was to collect 300 interviews. Several decisions had made it imperative that all interviewers be treated with absolute equity in terms of their work assignments and potential earnings.

When all of these factors were considered simultaneously, one reasonable alternative emerged. This was to use five interviewers assigned 19 SU's each and each with the responsibility for gathering 60 interviews. Time, however, worked against this solution. Rather than use a small number of interviewers, each gathering a large number of interviews, a large number of interviewers was used with each gathering a smaller number of interviews. This procedure reduced the length of time in the field.

The decision was made to hire 30 interviewers and have each interviewer gather ten interviews. With 30 interviewers and 95 SU's each interviewer could be assigned three SU's. This would have left five SU's as a general reserve (i.e., $30 \times 3 = 90$ SU's). The expected size of 4 ODU's/SU would have meant that each interviewer would have 12 assigned ODU contacts (i.e., $4 \text{ ODU's/SU} \times 3 \text{ SU's} = 12 \text{ ODU's}$) from which to obtain ten interviews. Such a rate of success was considered unlikely.

The adaptability of the basic area sampling plan proved useful for a late-stage design change. It was decided to assign five SU's to each of the 30 interviewers. Three of the SU's would be designated as "primary" and the remaining two as "reserve" SU's for each interviewer. The primary SU's would be those areas in which the interviewer would first attempt to obtain his ten interviews. If it proved impossible for the interviewer to obtain his ten interviews in the three primary SU's, then he would be permitted to use his reserve SU's to obtain the balance of interviews needed. This plan would permit each interviewer a maximum of 20 ODU contacts (i.e., $4 \text{ ODU's/SU's} = 20 \text{ ODU's}$).

Obviously this design change demanded that 150 SU's be in the sample rather than 95. With a sampling rate of 1 in 25 and other appropriate changes, a sampling plan of 150 SU's was constructed. As shown in Table II,

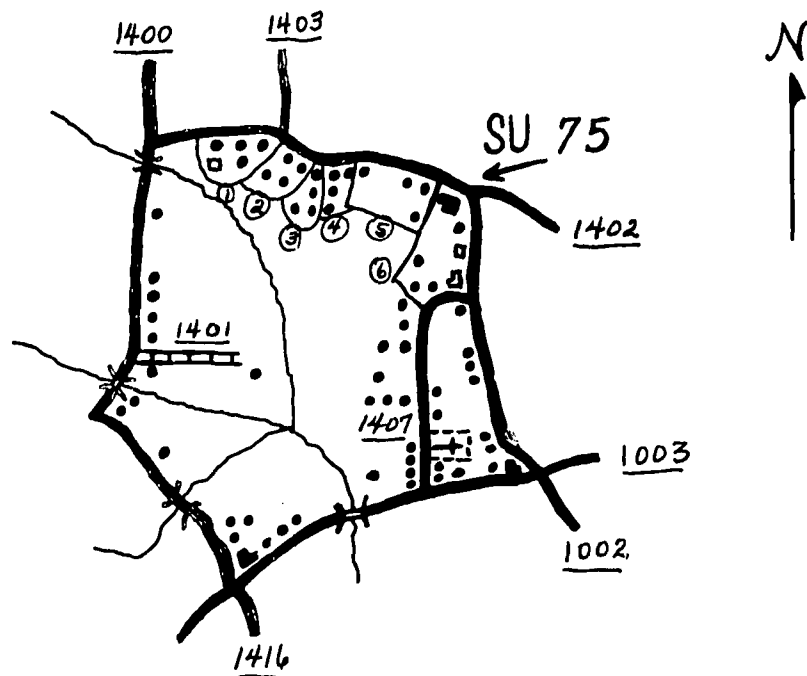


Figure 2. Division I., Section B., Block 3; from the County Master Map (Sample 1.).

RELEVANT KEY SYMBOLS

Indicated occupied dwelling unit -	•
Vacant structure -----	□
County road -----	—————
County road number -----	<u>1402</u>
Unpaved county road -----	———
Bridge -----	———
Stream -----	~~~~~
Cemetery -----	⊕
Business establishment -----	■

Appendix II under "Second Adjustment," 88 SU's were necessary for the Urban Zone, 8 in the Rural Place Zone, and 54 in the Open Country Zone. In other words, 34 more SU's had to be drawn in the Urban Zone (i.e., $88-54 = 34$), 3 more SU's in the Rural Place Zone, and 18 more SU's in the Open Country Zone. When these SU's were drawn and located on their appropriate master maps, it was possible to finish the map work for the first survey.

The final step for the first survey was the preparation of 30 individual interviewer maps. These maps were of two types: (1) County Interviewer Maps (Appendix I.d.), and (2) City Interviewer Maps (Appendix I.e.). Each map showed a unique set of five SU's. Three of these SU's were colored in red and were the primary units for that set of five. The remaining two SU's were colored in yellow and were the reserve SU's for that set.

The unique sets of five SU's for the County Interviewer Maps were taken from the County Master Map and the Rural Place Maps of those incorporated places where SU's appeared. The selection of the five SU's which constituted a set was arbitrary. It made no practical difference which interviewer was assigned the set so long as the sets were unique. The SU's, not the interviewer, determined the ODU's to be surveyed. Most sets, however, did consist of SU's with reasonable contiguity because the interviewers were to receive mileage payments as a part of their compensation.

Where a County Interviewer Map included a Rural Place SU, a Rural Place supplement map was attached to the County Interviewer Map. This supplement was merely a handdrawn Rural Map showing the Rural Place SU in detail.

The City Interviewer Maps required additional work. After the Urban SU's were grouped into unique sets of five SU's on the City Master Map, the cultural detail of each SU in each set was traced on overlay paper from the City Master Map because the City Interviewer Maps did not show dwelling unit culture. Each City Interviewer Map was prepared to show the approximate street locations of a set of Urban SU's and attached to it was the overlay showing those five SU's in full cultural detail. In this manner, a city interviewer would be able to locate the street on which an SU appeared and the exact ODU's which constituted that SU. In some cases a City Interviewer Map would include an Open Country Zone. Attached to these maps would be a County Interviewer Map showing just the SU included in that Urban set. On the City Interviewer Maps contiguity again governed the selection of SU's in a set, although mileage expense was less of a problem in the Urban Zone.

Table VI, Appendix II shows the groupings of SU's by primary and reserve designations for every City Interviewer Map (A. through R.) and every County Interviewer Map (I. through XII.).

Data Gathering

The primary objective was to obtain completed preliminary Cognitive Openness Scales from those adult residents of Wilson County who were either the head-of-household or mate, and who resided within the selected SU's of the area sampling plan. It was apparent that this would require door-to-

door interviewing within the selected SU's in order to contact the appropriate residents, elicit their cooperation, and to administer the instrument.

It was decided that only Wilson County residents should be hired to work as field interviewers. This policy was seen as serving the interests of the project in several ways. In a colloquial sense, these interviewers would be regarded as "neighbors" rather than "outsiders." In most cases the interviewers would be similar to the potential respondents in terms of such factors as socio-economic background, location of residence, regional accent, etc. It was believed that for these reasons local interviewers would be more apt to gain the initial confidence of the residents than would a staff of interviewers selected from the student body at North Carolina State University. It was expected also that local interviewers would spread information about the project through informal channels of communication. This would serve to stimulate greater interest in the formal communication regarding the work of the project in Wilson County as it appeared in the local newspapers and on radio and television. The mileage expenses for individual interviewers would be reduced to a minimum because work assignments could be made on a basis of proximity of the interviewers to the sets of SU's.

It made no difference which interviewer was assigned a set of the selected SU's. The ODU's to be contacted would always be the same on any given City or County Interviewer Map, regardless of which interviewer was assigned that map. This situation generated demand for any number up to a maximum of 30 interviewers so long as every work assignment (i.e., a City or County Interviewer Map) was covered by some individual interviewer.

The responsibility of each interviewer with a given work assignment was to obtain 10 complete interviews (i.e., 10 Cognitive Openness Scales, each at least 75% completed) from among the adult residents whose dwelling units were within that work assignment. A further stipulation was that for each 10 interviews, five were to be completed by male respondents and five by female respondents, although a 6:4 sex ratio would be allowed. This condition was set to avoid a sex bias in the Cognitive Openness Scale data.

The compensation each interviewer received was determined by three factors: (1) \$5.00/completed interview (as defined above), (2) mileage expense while conducting project business at a rate of \$.08/mile, and (3) \$1.50/hour while attending training sessions or other meetings called by the project staff.

An Interviewer Training Manual (Appendix IV) was prepared which explained the design and objectives of the Center for Occupational Education and the project and the relationship of the Center and the project personnel to North Carolina State University. This was to supply the interviewers with the information they would need to respond to questions raised by the Wilson County residents with whom they would be in contact. The remainder of the training manual was devoted to the actual field work for this first survey. Included in this was a section on successful interviewing practices, a detailed discussion of the area sampling plan the the

use of the individual interviewer maps, a section concerned with the Cognitive Openness Scale and how to administer it, and a section which detailed the rates and method of compensation for the interviewers.

The assistance of the Wilson office of the North Carolina Employment Security Commission was elicited for the hiring of the field interviewers for this first survey. The excellent cooperation of the director and staff of this office considerably eased the burden of finding suitable job applicants from among the residents of Wilson County. Local newspaper, radio, and television advertising of this job opening was arranged by them as well as personal contact with likely applicants of whom they had prior knowledge.

Project staff workers traveled to the Wilson office of the North Carolina Employment Security Commission for the purpose of interviewing all applicants. The routine for each day was the same. A small group of applicants was scheduled to arrive at a given time. Each applicant would first fill out a brief biographical information card, then the group would meet together with all of the staff interviewers. The staff interviewers would explain the general background and nature of the study, the duties and compensation of the field interviewers. They answered all questions from the group that were of a general nature. This group session averaged about 15 minutes in length. A brief recess was then called while the staff interviewers divided into teams of two and prepared for individual interviews with the applicants who remained interested in the position.

Each individual interview was partly structured and partly open-ended. It began with a detailed description of the role of the field interviewers. All questions about the position by the applicant were answered as they arose. A detailed employment history was taken from the applicant with particular note taken of previous interviewing experience and positions which involved face-to-face contact with other persons (e.g., salesmen, ministers, school teachers, census takers, etc.). The applicant's opinions toward Wilson County and its economic, political, and educational institutions were requested and noted. Often these opinions were discussed at length when the applicant was willing. Each applicant was asked to locate his particular residence on the City or County Master Map, whichever was appropriate. This served to give the staff interviewers a rough estimate of the applicant's map reading ability. If the applicant was currently employed, his available time for field interviewing was discussed. All applicants were asked if they had their own transportation or could arrange for it. The interview was concluded after all questions, those of the staff interviewers and the applicants, had been satisfied. Immediately following each individual interview the applicant was rated by the staff interviewers on factors such as verbal fluency, appearance, interest in Wilson County and its future, time available for field interviewing, ability to read a map, and handwriting.

At the end of the interviewing week, all staff interviewers met in conference and reviewed every applicant's records and ratings. Twenty applicants were selected to work as field interviewers and were asked to attend a training session. Of the 20 applicants, 17 indicated that they would attend the training session and the remaining three indicated that

they could not accept employment.

Field interviewers were given a three-hour training session with various staff members leading the discussion of the different sections of the training manual. The manual was discussed in detail and questions from the field interviewers were answered. In addition to a training manual, each interviewer received a folder containing an identification badge, a letter of employment, a list of the names and phone numbers of various officials of Wilson County who had knowledge of the project, and a City or County Interviewer Map. Most of these items were to help the interviewer convince the respondents that they were legitimate representatives of the project. At the end of the training session each interviewer was given a bundle of ten Cognitive Openness Scales to accompany the initial work assignment.

The interviewing in Wilson County required 14 work days. During this period, a temporary field headquarters was maintained by various staff members at a centrally-located motel in Wilson. The staff members coordinated the activities of the field interviewers, collected the completed Cognitive Openness Scales and recorded which interviewer had returned them, answered telephone inquiries from Wilson County residents who had questions about the project, and gave out new work assignments to those interviewers who were able to complete their initial assignments.

As could be expected, some field interviewers were very successful in completing their work assignments while others were less successful. In a few cases the interviewers were assigned areas for which they were unsuitable. For example, one young interviewer proved unsuccessful in covering a new assignment where most of the residents were elderly, retired people. This interviewer had been successful in her initial assignment where the residents were largely young suburbanites.

At the end of the field interviewing period a total of 240 completed Cognitive Openness Scales had been obtained. While this total was less than the ideal of 300, it was sufficient for the purpose.

Item Analysis

Measurement of cognitive openness as a system variable logically requires that the items (belief statements) comprising the final COS be internally related. As a means of selecting an internally homogeneous set of items, each item was analyzed by computing the product moment correlation between item score and total score.

Items were scored by assigning the integer corresponding to the lower bound of the intensity scale interval containing the respondent's mark. The integer was signed (-) if the respondent disagreed with the item and (+) if agreed. For example, if a respondent placed a mark within the scale interval 7-8 and disagreed with the item, he would be assigned a score of -7. The scoring procedure generated a score range from -9 to +9 in integer steps.

The 240 preliminary COS's were randomly divided into three groups: two primary groups of 100 each and one secondary group of 40 designated as a Hold-out group. Item total score correlations were computed for each item separately for each of the two primary groups. Thus, each item had two item-total correlations for analysis which tended to lessen the possibility that an item would be selected on the basis of a spurious correlation. Each correlation was independently tested against the null hypothesis $H_0: r_{\text{item-total}} = 0$ and the probability levels combined according to a χ^2 test with 4 df (Guilford, 1965, p. 248).

Items were ranked according to the magnitude of their associated χ^2 values. The observed χ^2 values ranged from 111.042 - 0.256 ($\chi^2_{.05} = 9.488$, 5% critical level). Items were selected according to magnitude of χ^2 and variability of correlation for the two primary groups, with the additional constraint that no more than 70 items be included in the final COS.

The final COS (See Appendix V) consisted of 65 belief statements. The χ^2 's ranged from 111.04 to 55.39 with correlation pairs ranging from (.62, .55) to (.48, .42).

Reliability Analysis

The internal consistency reliability of the final COS was evaluated on the hold-out group in order to avoid any foldback contamination resulting from the use of original screening groups. The person-by-item ANOVA is presented in Table 1.

Table 1. ANOVA for Reliability Computation

Source	SS	df	MS
Subjects	27,005.05	39	692.44
Items	15,344.15	64	239.60
Interaction	84,589.75	2496	33.89

The interval consistency reliability according to Hoyts' method (Guilford, 1954, p. 383-5) was found to be

$$r_{tt} = \frac{692.44 - 33.89}{692.44} = .95$$

which is evidence for the homogeneity of the final COS induced by the item analysis procedure.

VALIDATION OF THE COS

If the COS is a valid operational measure of cognitive openness as an underlying system construct then COS measurements should support hypotheses generated from the implicational properties of the construct. Conversely, if the COS fails to support such hypotheses, then it is by definition not a valid measurement of the openness construct.

Specific Hypotheses

For the purposes of this report, the following hypotheses were formulated:

I. COS measurements vary inversely with educational level:

This hypothesis is crucial since education is regarded as the primary means of openness modification.

II. COS measurements vary inversely with income:

This hypothesis is largely a restatement of hypothesis I since income is a function of educational level.

III. COS measurements vary with age:

Internal structure becomes more rigid and isolated from environmental shock, as older systems cannot afford large expenditures of energy to overcome goal blockages.

IV. COS measurements vary with race membership:

Limited environmental opportunities restrict the variety pool available to minority group members.

V. COS measurements relate to community evaluation:

Openness implies a greater propensity for change and hence a more critical evaluation of the sufficiency of the existing community institutions.

VI. COS measurements vary inversely with degree of exposure to information sources:

Closed systems insulate themselves from environmental disturbances by restricting input. Since closed systems rely more on existential validity and less on reality testing, there is less need for information.

VII. COS measurements are related to community awareness:

Closed systems seek less information and as such have less knowledge about community events, services and activities.

VIII. COS measurements are related to general conception of major world problems and their proposed solutions:

Closed systems tend to form a conglomerate reality polarized into good and evil. Forces acting to alter existing values are to be feared and resisted. Problem solution involves control and the enforcement of conformity through penalization of deviation.

Household Survey Schedule

The Household Survey Schedule (See Appendix VI) was designed to gather data in each of seven areas: (1) biographical, (2) job needs and intent, (3) job outlook, (4) migration history, (5) community perception, (6) exposure to information, and (7) community leadership. The schedule provided a common data base for project reports by Williams (1969) and Teague (1969) as well as for COS validation. As such, certain portions were of no significance for the validation of the COS. The Household Survey Schedule plus the final COS was administered to a random sample of adult residents of Wilson County, North Carolina.

The Second Sampling Plan

The second sampling required a representative sample of the adult population of Wilson County, North Carolina subject to the following constraints: (1) that the sample should consist of no less than 300 and no more than 350 respondents, (2) that no respondent in the first sample would be a respondent in the second sample, (3) that each respondent should be a unique head-of-household or spouse of same, not both, of the resident adult population of Wilson County, North Carolina, and (4) that the sample should reflect the characteristics and distribution of the county population in terms of such factors as location of residence, race, and sex (as defined previously).

The design of the area sampling plan and the field work for the second survey of Wilson County residents was essentially the same as for the first survey. The principles and rules of area sampling were unchanged. The experience gained through the first survey, however, revealed the advantage of making certain parameter changes in the second survey. One such change was the determination of the sampling rate from the needs of the field work design. A second important change was in the determination of the expected number of ODU's/SU. These two changes accounted for almost all differences between the first and second surveys.

The first survey and field work had demonstrated the desirability of including a larger reserve of SU's in the initial design of the area sample. This meant that each work assignment for an interviewer would allow him more possible ODU contacts from which to obtain his quota of interviews. This could be accomplished in at least two ways. The first was to increase the number of SU's in any given work assignment. The second was to increase the size of the SU's by changing the expected number of ODU's/SU to some number larger than four ODU's/SU.

The first method was unsatisfactory because it involved a considerable amount of map work to locate and label the increased number of SU's. The second method, although requiring statistical changes in the sample design would require less map work preparation. With its saving in time and in the associated clerical expense in preparing maps, the second method of increasing the possible ODU contacts per work assignment was chosen. The expected number of ODU's/SU was raised from four to five ODU's/SU in the design of the area sampling plan for the second survey. In the second survey, then, each work assignment would consist of five SU's (i.e., three primary and two reserve SU's) of size five ODU's/SU, or a total of 25 possible ODU contacts ($5 \text{ ODU's/SU} \times 5 \text{ SU's} = 25 \text{ ODU's}$).

The column labeled "Number of ODU's" in Table 1, Appendix III shows the number of ODU's in Wilson County by stratum to be:

Urban Zone	8686
Rural Place Zone	808
Open Country Zone	<u>5962</u>
Total	15,356

The discrepancy between these totals and the corresponding totals for the first survey (Table I, Appendix II) was traced to a minor clerical error in taking the Open Country Zone INOD count. The effect of this error on the first survey was negligible, but its discovery forced several recounts of the INOD with the result that the totals used for the second survey were more accurate.

In Table 1, Appendix III the number of SU's in the original allocation was found by dividing the number of ODU's in each stratum by the expected number of five ODU's/SU. The adjusted allocation of SU's to the strata was the result of a new sampling rate of 1 in 20 ODU's. With the desire to maintain the field work design of 30 work assignments, each with a unique set of 5 SU's, 150 SU's of size 5 were required for the second sample. A sampling rate of 1 in 20 ODU's yielded approximately 768 ODU's ($15,356 \div 20$) or slightly less than 154 SU's of size 5 ($768 \div 5$). The SU's in excess of 150 were no problem since they could be held as a general reserve. To assure a proportionate sample by strata, the number of SU's in the original allocation was rounded to the nearest integral number divisible by 20 to obtain the number of SU's by stratum in the adjusted allocation.

Table II, Appendix III shows by stratum the proportionate number of SU's it was necessary to select in order that the second sample would conform to a sampling rate of 1 in 20. Thus, 85 SU's had to be selected in the Urban stratum, 8 SU's in the Rural Place stratum, and 59 SU's in the Open Country stratum. This insured a proportional sample by stratum that was large enough to allow construction of work assignments of the type desired.

Table III, Appendix III shows the entire assignment of SU's to places in Wilson County by stratum and the assignment of serial numbers of these SU's. Tables IV, V, and VI of Appendix III show, respectively, the alloca-

tion of SU's and the assignment of their serial numbers to the Enumeration Districts of the City of Wilson, to Blocks Within Enumeration Districts, and to Divisions, Sections, and Blocks Within the Open Country.

After the assignment of SU's and serial numbers it was possible to draw the second sample and to locate the selected SU's. The procedure was similar to that used in the first survey. From Table II, Appendix III it was determined that 85 SU's had to be selected from the Urban stratum. Table III, Appendix III showed that the serial numbers for the Urban SU's ran from 0001 to 1700. A table of random numbers was used to select 85 different numbers (i.e., sampling without replacement) from within this range. Table III, Appendix III shows these Urban SU serial numbers as drawn and also in ascending numerical order. This same process was used to select 8 SU's from those in the Rural Place stratum, and 59 SU's from those in the Open Country stratum.

The locations of the selected SU's in the second sample were found by using essentially the same procedures as were used in the first survey. Given any SU number, for example SU 10 in the Urban stratum, the appropriate Table of Appendix III was used to find the block within which that SU fell. SU 10 fell in Block 5 of Enumeration District 7 N (Table V, Appendix III). It was the second SU of two SU's allocated to that block. The rules for constructing the SU's within a block remained unchanged except that now each SU contained five ODU's rather than four. SU 9 of Block 5 was marked by starting with the ODU occupying the extreme northwest corner and counting off five ODU's in a clockwise direction. SU 10 obviously consisted of the five remaining ODU's in the block. These five remaining ODU's were colored and labeled as SU 10. As in the first survey, this process was reiterated until every selected SU had been located and marked on its appropriate City of County Master Map or Rural Place Map.

The City Interviewer Maps and the County Interviewer Maps were then prepared. Each map was designed to be a single work assignment by locating a unique set of five of the selected SU's for an interviewer to cover. Large scale tracings of the Urban SU's showing the specific ODU's within each SU were again included in the City Interviewer Maps. The handdrawn Rural Place Maps showing specific ODU's within the Rural Place SU's were included with those work assignments containing the Rural Place SU's. The sets of SU's were again reasonably contiguous so that interviewer mileage expenses would be minimized. Each set of five SU's was also divided into three primary SU's and two reserve SU's, as in the first survey. Thus, each work assignment (i.e., a City of County Interviewer Map) contained 15 ODU's in the three primary SU's and 10 additional ODU's in the two reserve SU's, or a total of 25 possible ODU contacts. Table VII, Appendix III shows the construction of all work assignments. The alphabetized work assignments denote City Interviewer Maps, and the Roman numerals denote County Interviewer Maps.

Data Gathering

The design of the field work for the second survey of Wilson County

residents was similar to that of the first survey. The only major differences were the hiring of a field manager and the acquisition of a temporary field headquarters. A list of the duties and compensation of the field manager is presented in Appendix VII.

The officials at Atlantic Christian College in Wilson, North Carolina were contacted with regard to the use of office space on their campus as the field headquarters for the second field survey. As a result, a well-located office for the duration of the second field survey was obtained without charge.

Six of the most competent field interviewers from the first field survey were again employed. The remainder of the field interviewers were obtained in the same manner as the first field work. Applicants for the position of field interviewer were interviewed in the Wilson office of the North Carolina Employment Security Commission. Eighteen individuals were hired, making a total of 24 field interviewers for the second survey.

A three-hour training session for the field interviewers was held in a conference room of the First Citizens Bank in Wilson, North Carolina. In attendance were the staff members of Project VI, the field manager for the second field survey, the field interviewers, and several interested citizens of Wilson County. Various staff members discussed different parts of the training manual which had been revised to suit the needs of the second field survey.

The responsibilities of the interviewers were discussed in detail. Each interviewer with a given work assignment was assigned an interview quota. A complete interview consisted of two parts: (1) a Household Survey Schedule, and (2) a final Cognitive Openness Scale, both filled out according to their separate instructions. All other details of the interviewers' responsibilities, their procedures, and their rates of compensation were the same as used in the first field survey, except the location of the field headquarters where the interviewers would return completed instruments and, in certain cases, receive new work assignments.

The field interviewers were again supplied with a folder containing a training manual, several items to establish their identity and legitimacy, an initial work assignment (i.e., a City or County Interviewer Map), and ten Household Survey Schedules and revised Cognitive Openness Scales.

The field interviewing for the second field survey required 19 work days. A staff member was at the field headquarters during the first five days of the field interviewing to assist the field manager. During the remaining period of the field interviewing, telephone contact was used to maintain communication with the field headquarters. Every Wednesday a staff member drove to Wilson to pick up all completed instruments and to discuss the progress of the field interviewing with the field manager.

Upon completion of the survey, a brief closing session was held with all field interviewers. This session provided the staff members the opportunity to debrief the field interviewers concerning their interviewing

experience. All remaining completed interviews were gathered and recorded as to which interviewer had returned them. Final tally indicated 324 usable COS and Household Survey Schedules had been attained.

Results

Only those responses on the Household Survey Schedule relevant to the validation of the COS were analyzed. In all cases, those items having discrete response categories were regarded as the independent variable and the COS scores as the dependent variable. The primary statistical analysis consisted of simple one-way ANOVA's. The category description, the number in each category, mean COS scores for each category, and the associated F value are presented separately for each relevant item in Tables 2-18. Whenever a trend analysis was performed the ANOVA is also presented.

Table 2. Age

Category	N	Mean	F
<20	7	.55	
20-29	58	-1.43	
30-39	60	-1.66	3.65**
40-49	77	- .84	
50>	120	- .06	

Table 2.A. Trend Analysis

Source	SS	df	MS	F
Linear	.6	1	.6	.06
Quadratic	61.6	1	61.6	6.11**
Remainder	84.8	2	42.4	4.20*
Error	3196.5	317	10.08	

*Significant at .05 level

**Significant at .01 level

The data tend to support the hypothesis that cognitive openness varies with age. The quadratic relation of openness with age was unpredicted a priori, hence no explanation is offered.

Table 3. Sex

Category	N	Mean	F
Male	165	-.62	.963
Female	159	-.97	

Although males had a slightly greater mean openness score than females, the difference was non-significant, which was in accord with a priori expectations.

Table 4. Race

Category	N	Mean	F
White	196	-1.73	48.1**
Non-white	128	.64	

As predicted, the mean COS score for non-whites was significantly greater than the mean COS score for whites, indicating that non-whites were significantly more closed than whites.

Table 5. Marital Status

Category	N	Mean	F
Married	263	-.96	
Single	20	-.56	
Widowed	32	.22	1.174
Divorced	5	.16	
Separated	4	.02	

**Significant at .01 level

No a priori difference in marital status was predictable from the construct. Although non-significant, it is interesting to speculate about the direction of the obtained difference.

Table 6. Annual Income

Category	N	Mean	F
<\$500	13	1.79	
\$500-\$999	19	.80	
\$1000-\$1499	18	.14	
\$1500-\$1999	18	.07	
\$2000-\$2999	44	-.27	
\$3000-\$3999	29	-.60	4.09**
\$4000-\$4999	21	-.96	
\$5000-\$5999	17	-1.68	
\$6000-\$6999	11	-2.88	
\$7000-\$7999	11	-2.47	
>\$8000	11	-3.56	

Table 6.A. Trend Analysis

Source	SS	df	MS	F
Linear	328.2	1	328.20	38.4
Remainder	20.0	9	2.23	.3
Error	1710.5	200	8.55	

As predicted, COS scores vary directly with income level. With the exception of one inversion, mean COS is perfectly rank ordered with respect to annual income level. The trend analysis indicates that the relation is linear as deviation from linearity is non-significant.

**Significant at .01 level

Table 7. Education - Last Year Completed

Category	N	Mean	F
0	3	.14	
1	3	1.73	
2	10	1.67	
3	15	1.60	
4	13	.06	
5	25	1.59	
6	14	1.04	8.31**
7	30	.03	
8	25	.56	
9	35	-.76	
10	27	-.98	
11	28	-1.42	
12	54	-2.71	
13	7	-2.35	
14	9	-4.75	
>14	22	-3.53	

Table 7.A. Trend Analysis

Source	SS	df	MS	F
Linear	672.46	1	672.46	86.77**
Remainder	293.53	14	20.97	2.71**
Error	2354.81	304	7.75	

**Significant at .01 level

The data in Table 7 strongly support the hypothesis that COS measurements are related to educational levels. Although a linear component accounts for nearly 70% of the between group SS, there still exists a significant deviation from linearity.

Table 8

Q. 45. Are the public schools preparing the youth of this community for jobs which are available?

Category	N	Mean	F
Yes	228	-0.71	3.43
No	37	-1.76	t=1.85* (one-tailed)

Given the assumption that the answer to Question 45 involves an evaluative judgment of the school system, the data tend to confirm the hypothesis that the more open person-systems tend to be more critical of the establishment. The use of a one-tailed t-test is considered justified, since directionality is implied in the prediction generated from the openness construct.

Table 9

Q. 48. Are there any adult education programs being offered in this area?

Category	N	Mean	F
Yes	186	-1.46	21.42**
No	67	.54	

The hypothesis that community awareness is a function of cognitive openness is strongly supported by the data.

*Significant at .05 level

**Significant at .01 level

Table 10

Q. 50. Are there any vocational training programs in this area?

Category	N	Mean	F
Yes	170	-2.03	33.14**
No	54	.55	

The responses to question 50 further substantiate the relation between openness and environmental awareness.

Table 11

Q. 53. Would you be willing to leave this area to find another job?

Category	N	Mean	F
Yes	114	-.54	2.27
No	180	-1.11	

Question 53 was included more for explanatory rather than confirmatory purposes. Since no a priori hypothesis was formulated, the results are not unexpected.

Table 12

Q. 70. Are the services of the police department adequate in this community?

Category	N	Mean	F
Yes	243	-.84	.415
No	44	-1.19	

Although in the expected direction, the results fail to support the hypothesis that openness is related to community evaluation.

**Significant at .01 level

Table 13

Q. 71. Are the services of the fire department adequate in this community?

Category	N	Mean	F
Yes	297	-.84	.16
No	10	-1.25	

Again, the mean difference is in the expected direction, but not significantly so. The fact that relatively few respondents sampled were critical of the services of the police and fire departments may have obscured any true difference in population means.

Table 14

Q. 72. Does the local government perform its duties as it should?

Category	N	Mean	F
Yes	230	-0.83	.24
No	44	-1.09	

Responses to question 72 follow the same general pattern. The mean COS scores are in the expected direction, but not sufficiently so to reject the null hypothesis.

Table 15

Q. 73. Does the local public welfare department do its best?

Category	N	Mean	F
Yes	188	-0.63	3.00
No	84	-1.37	t=1.73* (one-tailed)

As with question 45 (Table 8), the responses to question 73 tend to support the existence of a relation between openness and a tendency to be critical of the community institutions.

Table 16

Q. 74. Are the local schools meeting the needs of the children in this community?

Category	N	Mean	F
Yes	244	-0.68	9.88**
No	44	-2.31	

The responses to question 74 unequivocally support the openness-critical evaluation hypothesis.

Table 17

Q. 80. How many books have you read in the past year?

Category	N	Mean	F
0	102	0.13	7.18**
1	59	0.48	
2	17	-1.56	
3	18	-1.62	
4	19	-1.26	
5	21	-1.66	
6+	82	-2.26	

Table 17.A. Trend Analysis

Source	SS	df	MS	F
Linear	263.0	1	263.0	28.3**
Remainder	137.0	5	27.4	3.0**
Error	2888.9	311	9.3	

**Significant at .01 level

The hypothesis that exposure to information sources is a function of cognitive openness is strongly supported by the responses to question 80. A linear component accounts for a majority of the between SS; however, there is significant deviation from linearity, indicating that the relation is probably non-linear.

Table 18
Q. 85. Do you read the newspaper?

Category	N	Mean	F
Yes	252	-1.30	38.5**
No	67	1.29	

The difference between mean cognitive openness scores for those who claim to read the newspaper and those who do not so claim is striking support for the hypothesis of a relation between system openness and information-seeking activity.

The responses to question 91-- What are the greatest problems facing mankind today? were coded according to the categories in Table 19. Each content category was designated as an independent variable X_i ($i = 1, 2, \dots, 5$) with as many states as there were subclasses under each major classification. For example, X_4 corresponds to the "content" classification in Table 19 and has 19 states, each state corresponding to a subclass of the "content" classification. Each variable X_i contained a "no-data" state to cover the situation where the variable was not appropriate for classification of a respondent. This was necessary for completeness to insure that each response could be classified in exactly one state for each of the five variables. Classification of each response in exactly one category for each of the five independent variables generated a frequency distribution for each variable.

Variable X_6 was formed by splitting the COS scores at the median and designating the states depending upon whether a COS score was above or below the median. The hypothesis of a dependence between the independent variable X_i ($i = 1, 2, 3, \dots, 5$) and the dependent variable X_6 was tested by calculating the amount of information transmitted between an independent variable X_i and the dependent variable X_6 denoted $T_{i;6}$. According to McGill (1954), given the hypothesis that $T_{i;6} = 0$ in the population, $1.3863(324) T_{i;6}$ is distributed in the large sample case as χ^2 with $k-1$ df, where k is the number of states of the variable X_i .

The information transmitted and the associated χ^2 for each of the independent variables are presented in Table 20.

**Significant at the .01 level

Table 19. Coding Scheme for Question 91

Variable	State #	Variable Description
x_1		TEMPORAL
	1	Topical (current problem-this century)
	2	Historic-timeless problem
	3	No data
x_2		SPATIAL
	0	Extent of problem unspecified
	1	Local problem (community or state)
	2	National Problem (culture or society of U.S.A.)
	3	International Problem (culture or society of world)
	4	No data
x_3		IDENTITY
	0	Unclassifiable category
	1	Institutional problem (formal structure or organization)
	2	Cultural or societal problem (particular group and group-conflict)
	3	Individual problem (man in relation to himself, his fellow man, his god, his culture, his work)
	4	No data
x_4		CONTENT
	00	Unspecified content
	01	Political-governmental problem
	02	Judicial-legal problem
	03	Educational Problem (particularly the system, finance, goals)
	04	Family (as a group or unit) problem
	05	Industrial-business problem
	06	Economic problem (particularly distribution of wealth)
	07	Idological conflict (ideologies specified)
	08	Moral problem
	09	Racial problem
	10	Group conflict (other than racial or war)
	11	War (external to U.S.)
	12	War (internal-riots and violence in U.S.)
	13	Poverty (group affected specified)
	14	Hunger
	15	Disease (individual or limited group)
	16	Ignorance
	17	Destruction
	18	No data

χ^2_5	0	DIRECTION OF PROBLEM
	1	Direction unspecified
	2	Increasing (over time)
	3	Decreasing (over time)
	4	(no change)
	5	Excess (too much now)
	6	Deficiency (too little now)
	7	Inequity (imbalance without stating the deprived person(s))
	8	Deprivation (deprived individual or group named)
	8	No data

Table 20. Information Transmitted and Observed χ^2 for Five Problem Variables

$T(1;6) = .03933$	$\chi^2_2 = 17.66^{**}$
$T(2;6) = .05076$	$\chi^2_4 = 22.79^{**}$
$T(3;6) = .03037$	$\chi^2_4 = 13.64^{**}$
$T(4;6) = .14704$	$\chi^2_8 = 66.04^{**}$
$T(5;6) = .07749$	$\chi^2_8 = 34.80^{**}$

In all cases, the hypothesis of no relation between the problem classification and the COS measurement was rejected at the .01 level, thereby supporting the hypothesis that cognitive openness is related to conception of general world problems.

A similar analysis was performed on the responses to question 91: What do you think should be done about these problems? The responses were coded according to the classifications listed in Table 21. The results of the informational analysis are shown in Table 22. As before, χ_6 is the dependent COS measurement dichotomized at the median.

****Significant at .01 level.**

Table 21. Coding Scheme for Question 92

Variable	State #	Variable Description
X_1		RELATION OF SOLUTION TO PROBLEM
	1	Solution bears no relation to problem
	2	Solution bears indirect relation to problem (does not imply a cause of problem)
	3	Solution bears a direct relation to problem (solution implies a cause of problem)
	4	No data
X_2		SOLUTION - SELF-RELATION
	0	Solution-self relation unclassifiable
	1	Solution includes action by self ("we" or "I" take action)
	2	Solution external to self ("Others" must take action)
	3	No data
X_3		TEMPORAL RELATION OF SOLUTION TO PROBLEM
	0	Implementation of solution unclassifiable
	1	Immediate short-term solution (one shot cure-all)
	2	Long-term solution
	3	No data
X_4		EXTENT OF SOLUTION
	0	Extent of solution unclassifiable
	1	Local solution
	2	National solution
	3	International solution
	4	Cosmological
	5	No data
X_5		DIRECTION OF SOLUTION
	0	Direction of solution unspecifiable
	1	Return to old standards
	2	Create new standards
	3	Maintain status quo
	4	Nihilistic - destroy or eliminate current system without mentioning a new system
	5	Bureaucratic - add on to current system without correcting its inefficiencies
	6	Democratic - let everyone go his own way or find his own solution
	7	Dictatorial - force persons to accept solution
	8	No data

Table 22. Information Transmitted and Observed χ^2 for Five Solution Variables

$T(1;6) = .00985$	$\chi^2_2 = 4.42$
$T(2;6) = .00985$	$\chi^2_3 = 4.42$
$T(3;6) = .00985$	$\chi^2_3 = 4.42$
$T(4;6) = .01985$	$\chi^2_5 = 8.92$
$T(5;6) = .01985$	$\chi^2_8 = 8.92$

In no case is there a significant relation between solution variables and the COS variable. The equality of some of the variables appears to be more than coincidental and suggests the possibility of a tabulating error. However, subsequent partial re-analysis failed to locate a suspect area.

As an additional analysis, the hypotheses of the relation between age and COS and income and COS were retested treating attained educational level as a covariate. In the case of age, the null hypothesis failed to be rejected. In the case of income, the null hypothesis of no relationship was again rejected.

Reliability Analysis

The final COS was factor analyzed using principal components and a varimax rotational scheme. As a retest of internal consistency, it was hypothesized that a single general factor would be extracted. Contrary to expectations, 19 splinter factors were extracted. In view of the number of significant differentiations between response categories of selected items in the household survey schedule, the conclusion of low intrinsic reliability of the COS was rejected. The only immediate rationalization for the discrepancy between the two reliability estimates is the vagaries of random sampling.

IMPLICATIONS AND CONCLUSIONS

Confirmation of the majority of the hypotheses spawned from the openness construct in toto constitutes substantial evidence for the validity of the final COS as an operational measure of cognitive openness. Although an operational measure is of undeniable importance, the major significance resides in the explanatory richness of the resultant openness construct.

Openness as a variable takes its meaning from the larger context of general systems theory. Structure, process, and evolution as the being, acting, and becoming of organized systems are the fundamental concepts of interest. Person-systems are seen as interacting with their environment so as to create, maintain, and re-create transient enclaves of order that temporarily forestall the inexorable press toward maximum entropy. As such, the emphasis is less with "what" is done than with "how" it is done. Process as a manifestation of structure over time is approached in terms of strategies for the adaptation of structure as a function of environmental change.

Person-systems are seen not as passive agents reacting to environmental stimulation according to fixed and immutable external laws of nature, but as adaptive agents interacting with their environment in ways that are determined by the attribute states of the system rather than conditions imposed by the environment. Openness as an attribute state stylizes the system process and thereby signs the resultant structure in a predictable fashion.

The concept of community as a matrix of interacting person-systems achieves new vitality when addressed in the language of system theory. Concepts such as feedback, wholeness, centralization, differentiation, closed and open system, equifinality, competition, process, uncertainty, deviation amplification, and channel capacity reflect the pervasive influence of process technology and provide useful means for a realistic approach to social problems without sacrificing scientific rigor.

The systems implications for education as a community institution are legion. Education in the community context can be regarded as an organizational process where, through role interaction, the student as person-system is modified by the process according to strategies which have utility when evaluated against certain value grounds. The educational process in the modification of person-systems serves the dual and often antagonistic functions of preparing person-systems to adapt to a changing environment while simultaneously perpetuating the common value base that differentiates a community from a mass of individual entities. Rigid adherence to the control function of education runs the risk of inducing the deadening inertia of conformity or perhaps the even more damaging outcome of being dismissed as irrelevant. On the other hand, total educational commitment to change as an end unto itself results in a loss of direction and purpose with consequent long-term disastrous results for the community and ultimately the total society. The ultimate mission of the educational process then is to balance these functions so as to insure that the deviation aspects of person-systems are channeled to provide a collective resiliency to the demands of change.

Individual person-systems are throughputs of the educational process. During their period of stay in the process, they must be modified so as to have maximal payoff to the individual person-systems, to the immediate community, and to society in general. In order to have lasting effect, the educational process must modify the internal psychologic system, that set of rules for the formulation and evaluation of strategies for constructing theories of action. It is at this more basic level that the education process must operate, for a person-system closed to theory modification is deprived of the evolutionary facility to cope with the demands of change, and as such deprives community and society of the vitality of constrained deviation.

Since the psychologic system rests on a value ground, the modifier operators of the educational process must interface with the value ground. The set of symbols and the induced relations constituting the value ground are primarily constrained by the compound influence of the institutions of family, religion, and politics. Thus, even at the individual person-system level, the educational process modifiers must interact with the residual effects of other community institutions in true systems fashion.

The properties of the educational process are largely determined, regulated, and evaluated by the interactive effects of the political and economic institutions. These institutions provide the support and demand that shapes the educational process. The decisions and actions of governmental authorities determine the support given the educational process. If the political institution rigidly attempts to induce, through the educational process, compliance to a value system that is not commonly held, or attempts to allocate values that are not in accord with the prevailing tone of the times, then the viability of the process will suffer from misdirected political support. On the other hand, if through apathy and indifference, the educational process is isolated, the process may wither from an absence of support. In a similar manner, demand on the educational process is largely determined by the economic institution. Demand for technical skills in immediate short supply may press the educational process into assuming a training role justified at the level of the individual person-system by the pragmatic rationalization of education to earn a livelihood.

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APPENDIX I

MAPS USED FOR AREA SAMPLING PLAN

WILSON COUNTY STUDY

Appendix I.a. County Master Map

Type of map: polyconic, roadways and culture map

Area shown: Wilson County, North Carolina

Prepared by: The North Carolina State Highways Commission in cooperation with the U. S. Department of Commerce, Bureau of Public Roads from data obtained in a state-wide highway planning survey.

Source: North Carolina State Highways Commission; Raleigh, North Carolina. No cost to project personnel.

Detail: County culture shown as of February 1, 1964. The legend lists 107 symbols of cultural features, the most important for our purposes being: railroads; U. S., N. C. state, and Wilson County secondary, highways and roads; and distinct symbols for all residential structures indicating their state of occupancy (i.e., occupied or vacant and if the structure was intended for multiple family or single family occupancy). The highways and roads shown were as of January 1, 1965.

Div.

Div. 7

Div. 6

Div. 5

Div.



Div. 8

Div. 1

Div. 2

Div. 3

Div. 4

WILSON COUNTY NORTH CAROLINA

PREPARED BY THE
NORTH CAROLINA STATE HIGHWAY COMMISSION
IN COOPERATION WITH THE
U.S. DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS
DATE OF COMPLETION
STATE-WIDE HIGHWAY PLANNING SURVEY

NOTE: OFF ROAD CUTURE NOT SHOWN. MAP INCLUDES ONLY
STATE MAINTAINED ROAD OR IMPROVED HIGHWAY SYSTEM.

ERIC
Full Text Provided by ERIC

SHOWN AS OF FEB. 1, 1964
TOWN AS OF JAN. 1, 1965

KEY TO COUNTY ROAD NUMBERS
ALSO NUMBERS 1001 - 1004

SCALE

SCALE FOR ENLARGEMENTS

Appendix I.b. City Master Map

Type of map: planimetric, "existing land use" map

Area shown: the city of Wilson, North Carolina and surrounding environs up to a limit of one mile beyond the 1966 corporate boundary.

Prepared by: the North Carolina Department of Conservation and Development, Division of Community Planning, for the Wilson Planning Board. Data obtained by extensive field survey conducted in January 1966.

Source: the North Carolina Department of Conservation and Development, Division of Community Planning, Eastern North Carolina Section, headquarters at Raleigh, North Carolina. The cost of this map was \$5.00 for a black and white reproduction of the master map.

Detail: This map shows all residential, transportation, manufacturing, retail and wholesale trade, warehouse, service, and social-cultural facilities, establishments, and/or grounds and their locations, and all roadways, streets, and prominent natural features contained within the corporate limits of Wilson, N. C., and the surrounding environs up to a limit of one mile in all directions. All dwelling units were identified as either single-family units, two family units, or multi-family units with number of families designated, or as rooming, boarding, and fraternity housing units. No designation is given for vacant housing units.



75

Appendix I.c. Rural Place Map

Type of map: hand drawn, planimetric, cultural map

Area shown: the incorporated place of Stantonburg.

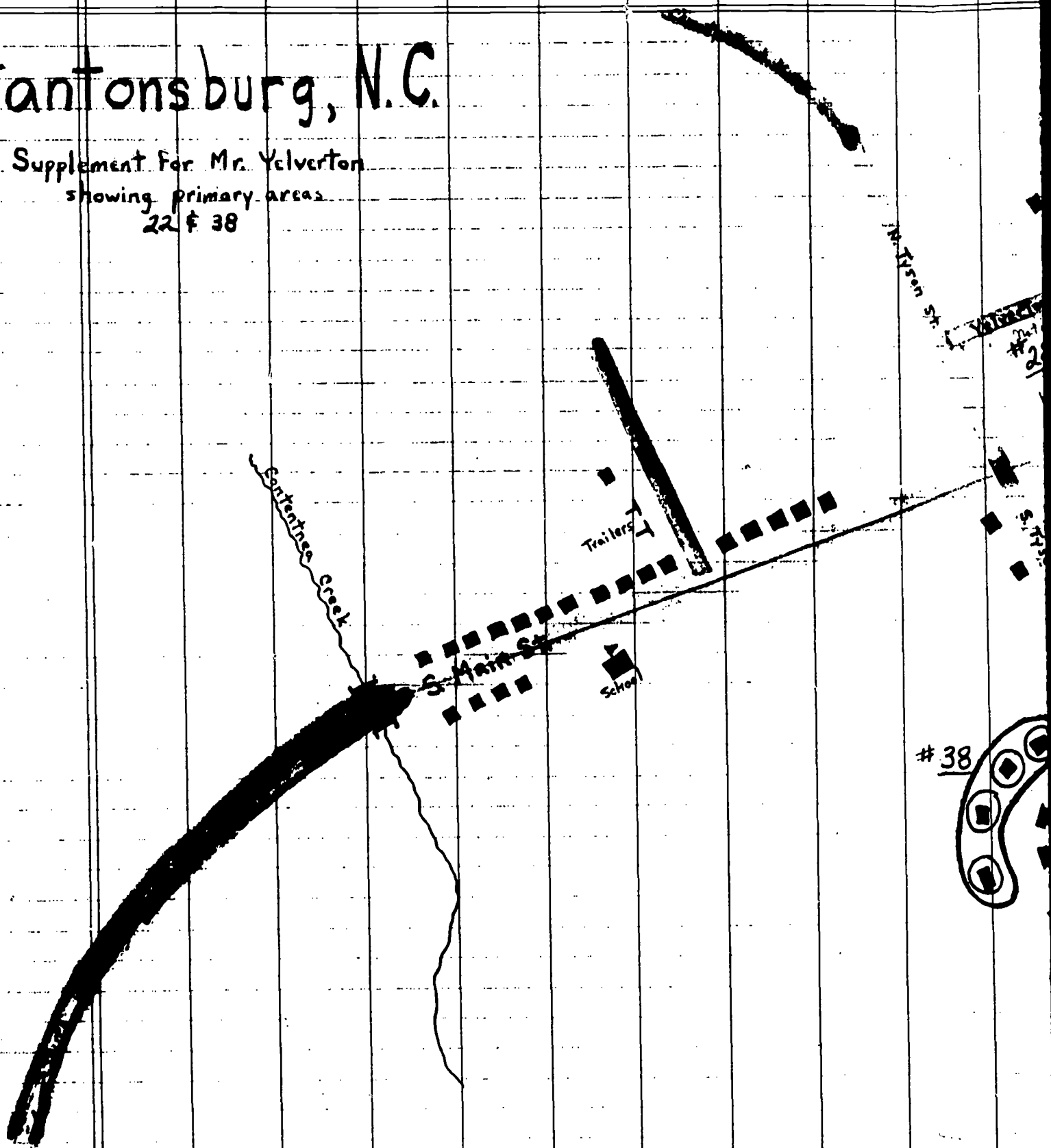
Prepared by: Graduate assistants of the Project II staff from data gathered by field observation in September 1966.

Source: Same as above. Cost of field observation less than \$200.

Detail: No suitable maps were found to exist for the seven incorporated places comprising the Rural Place Zone of Wilson County, N. C., so, of necessity, maps of the roadways, streets, and residential features of these rural places were hand prepared from data taken from field observation. This field work consisted of cruising through these rural places by automobile and marking all roadways, streets, and residences on crude, preliminary maps. These preliminary maps were later redrawn in full detail under the guiding principle that a person unfamiliar with these rural places should be able, through use of these maps, to find specific residences in each rural place. The map of Stantonburg serves as an example.

Stantonsburg, N.C.

Supplement For Mr. Yelverton
showing primary areas
22 & 38



Appendix I.d. County Interviewer Map

Type of map: polyconic, roadways and culture maps.

Area shown: Wilson County, North Carolina

Prepared by: the North Carolina State Highways Commission in cooperation with the U. S. Department of Commerce, Bureau of Public Roads from data obtained in a state-wide highways planning survey.

Source: North Carolina State Highways Commission, Raleigh, N. C.
Per map cost was \$.60.

Detail: This map appears to be just a smaller reproduction of the County Master Map (Appendix I.a. above), but it contains two important differences. First, it shows county culture as of April 1, 1961, not as of February 1, 1964. Second, it shows the highways and roads system as of January 1, 1962, not as of January 1, 1965. In any case of noted discrepancy between the County Master Map and the County Interviewer Map, the details of the former were always utilized in preparing the latter for field work. This map, rather than copies of the County Master Map, was used for field work because of its less cumbersome size. The original County Master Map measured 3' by nearly 5'.

Appendix I.e. City Interviewer Map

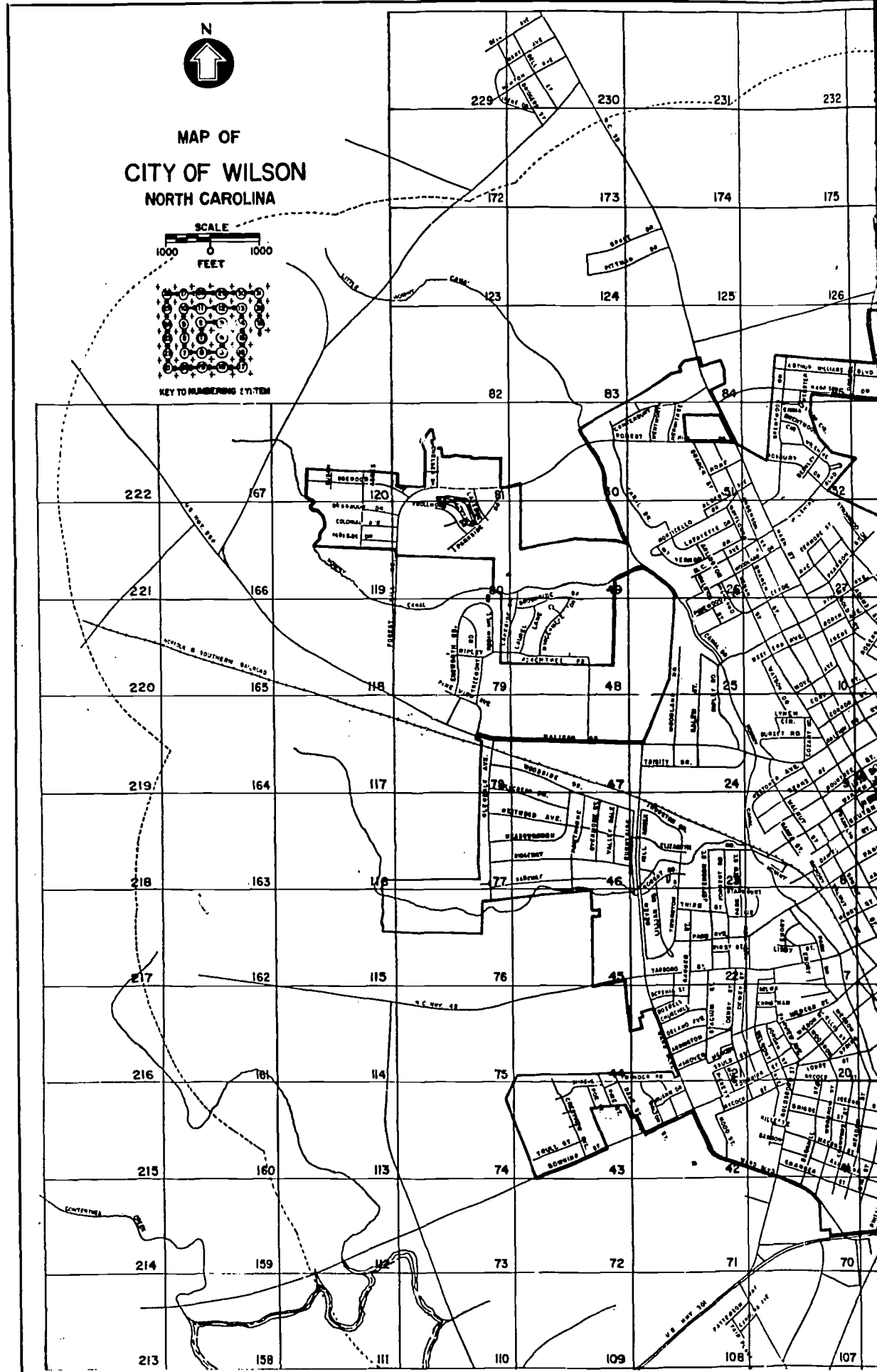
Type of map: planimetric, street and roadway map.

Area shown: the city of Wilson, North Carolina, and the surrounding environs up to a limit of one mile beyond the 1966 corporate boundary.

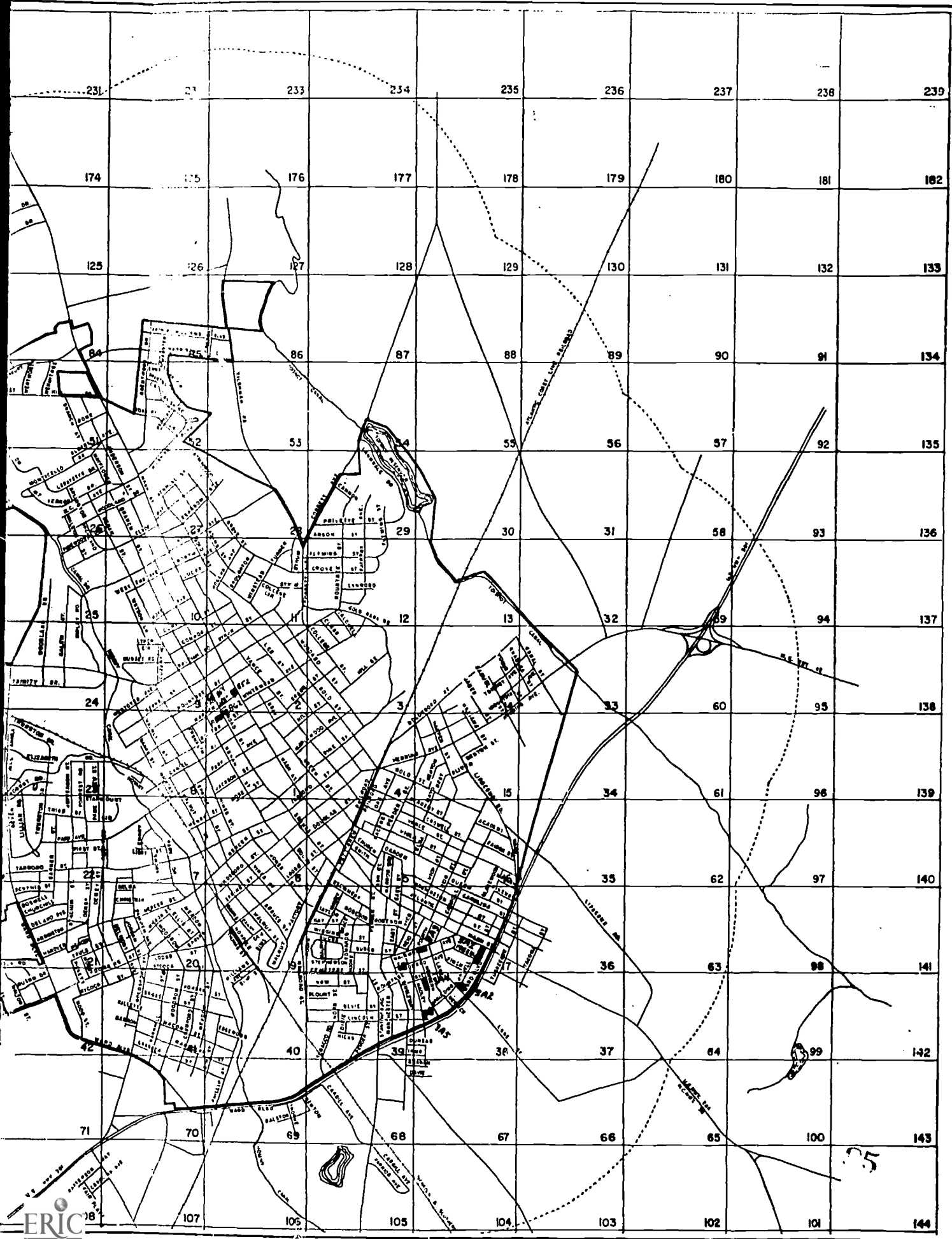
Prepared by: The Wilson Chamber of Commerce and the City Council of Wilson.

Source: The Wilson Chamber of Commerce. Per map cost was \$.10.

Detail: This map was a simple street and roadway map of the city of Wilson. It showed no cultural features; however, it did contain a numbered grid index system for ease in locating streets from an alphabetical listing of street names and their corresponding grid blocks. This map was used by city interviewers to find the general location of the areas in which they were to work.



istributed By The Wilson Chamber of Commerce and The City of Wilson



Appendix I.f. Enumeration District Map of Wilson, N. C.

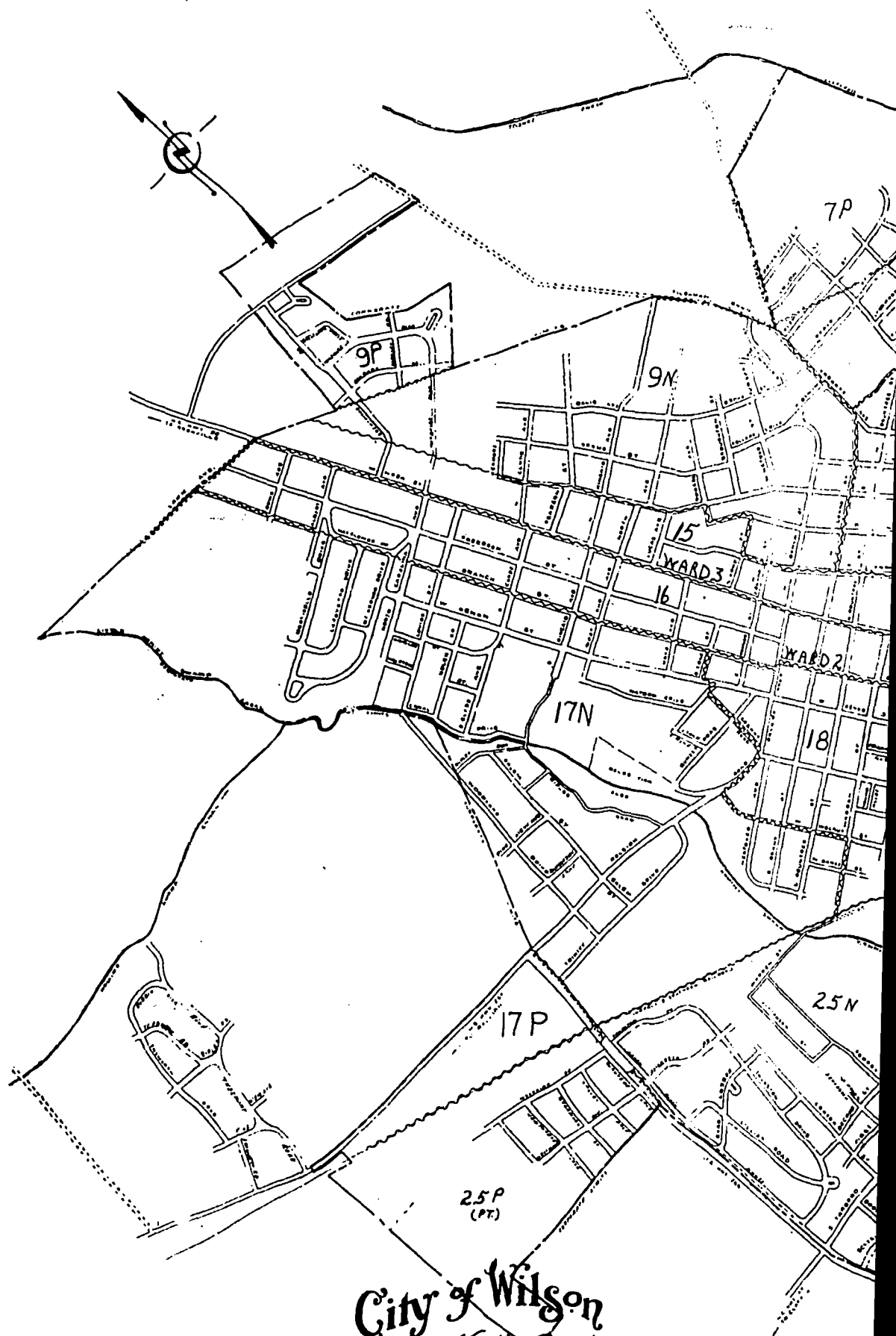
Type of map: planimetric, street and roadway map

Area shown: the city of Wilson, North Carolina, contained within the 1958 corporate boundary.

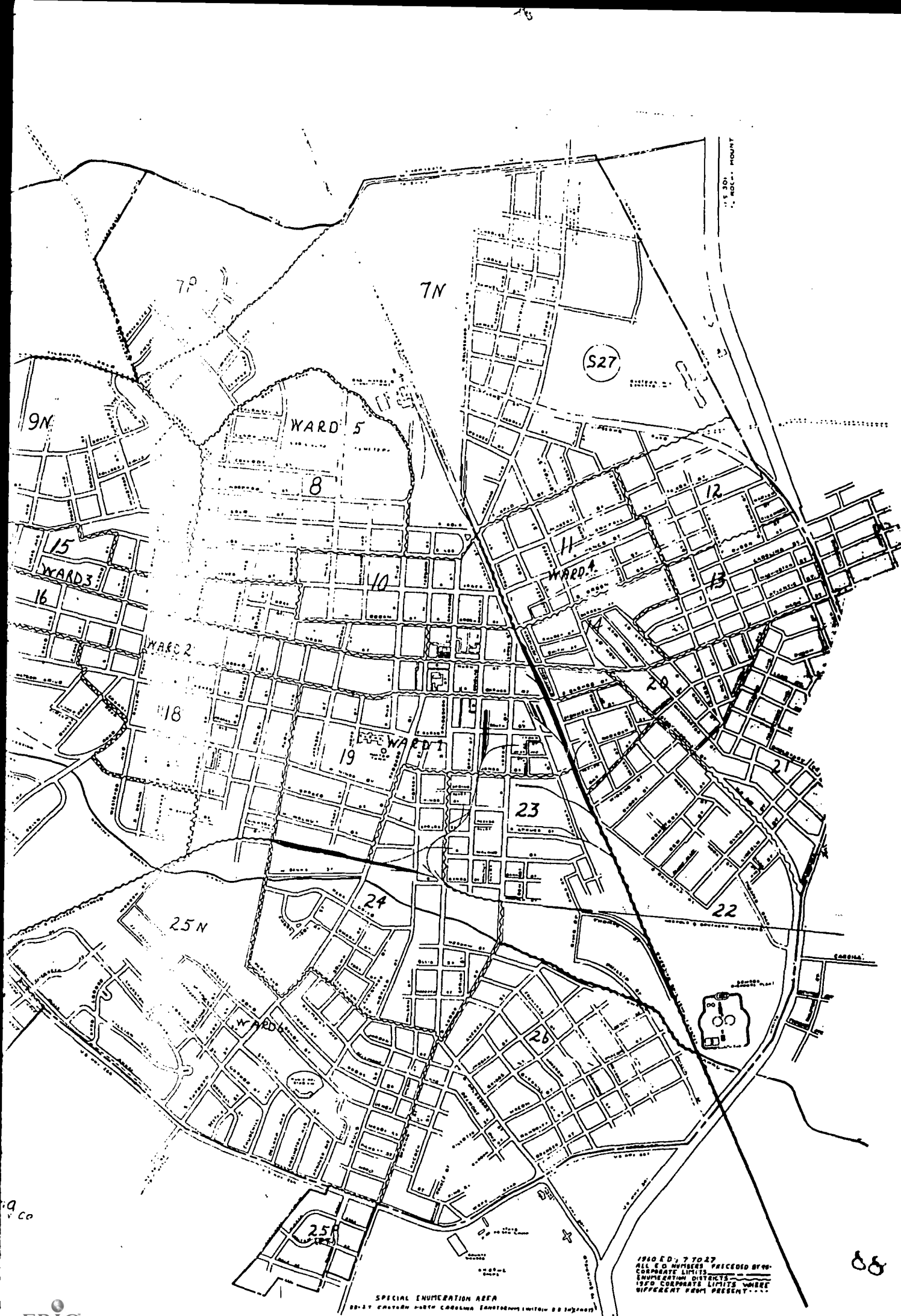
Prepared by: Geography Division, U. S. Bureau of the Census. Last revision 1958.

Source: Department of Rural Sociology, North Carolina State University. No cost to project personnel.

Detail: This was a simple street and roadway map of the city of Wilson. Shown on this map were the street boundaries of the Census Enumeration Districts as determined for the 1960 census. An enumeration district is the geographic unit of enumeration in the Census of Population and Housing. These districts are basically the territories laid out as work assignments for the Census enumerators and are designed to provide statistics for each political or statistical type of area (Monroe and Finkner, 1959, pp. 49-50.)



City of Wilson
North Carolina
INCORPORATED 1898 WILSON CO



1940 ED: 7 TO 27
ALL ED NUMBERS PRECEDED BY 90-
CORPATE LIMITS
ENUMERATION DISTRICTS
1950 CORPATE LIMITS WHERE
DIFFERENT FROM PRESENT...

SPECIAL ENUMERATION AREA
25-27 EASTERN NORTH CAROLINA SANATORIUM (WITHIN 200 FEET)

88

Appendix I.g. Central Business District (CBD) Map

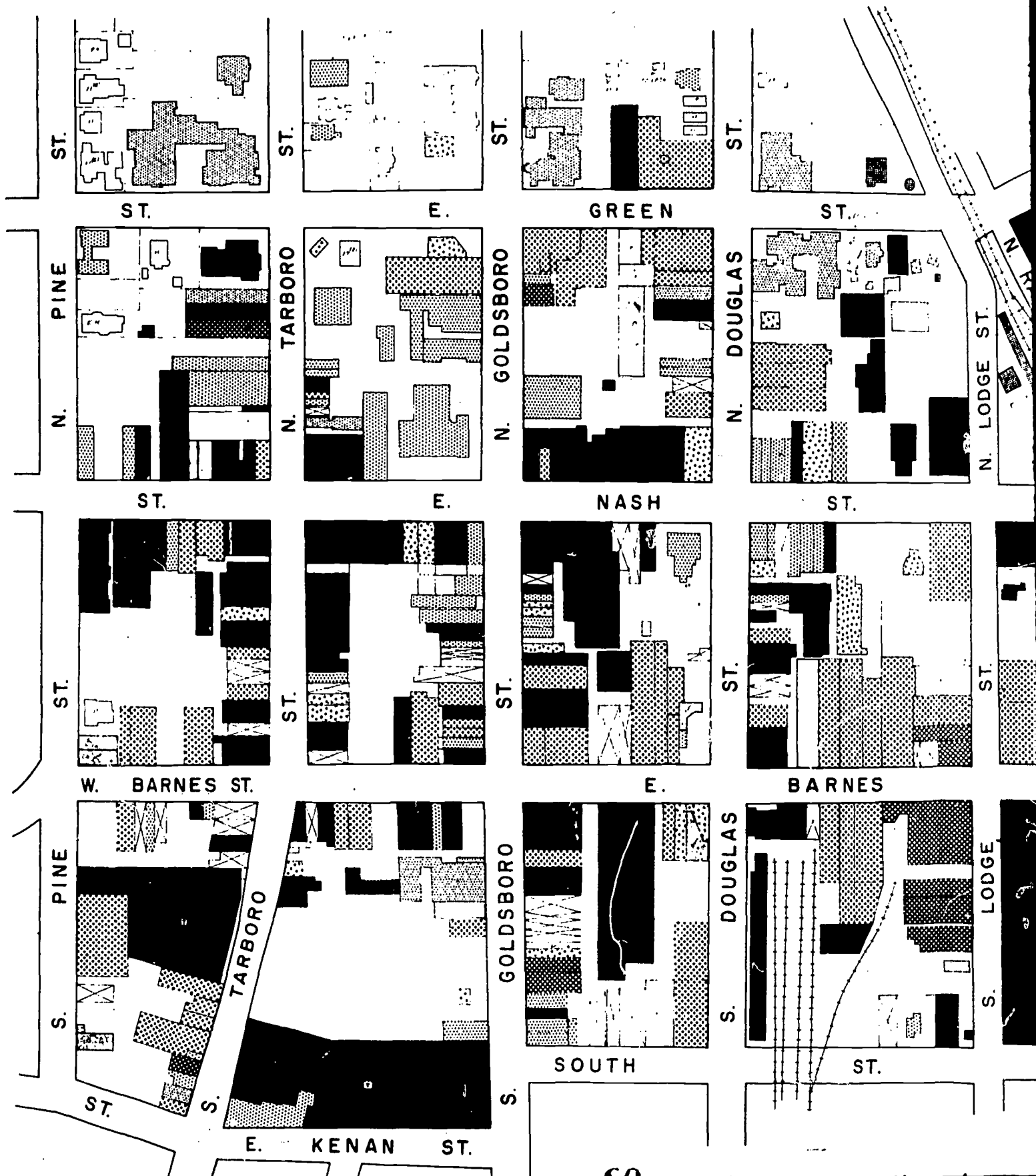
Type of map: planimetric, "land use" map

Area shown: twenty-two blocks of the downtown, central business district of Wilson, North Carolina

Prepared by: the North Carolina Department of Conservation and Development, Division of Community Planning for the Wilson Planning Board. Data obtained by field survey conducted in January 1966.

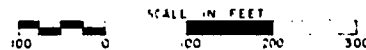
Source: the North Carolina Department of Conservation and Development, Division of Community Planning, Eastern North Carolina Section, headquarters at Raleigh, North Carolina. No cost to project personnel.

Detail: This map was drawn as a supplement to the map described in Appendix I.b. as the City Master Map. It shows the cultural details of the CBD of Wilson, an area which is blacked out on the City Master Map. The CBD Map was used in this project to locate the few residential structures contained in the CBD so that these structures could be marked in on the City Master Map and included in the survey.

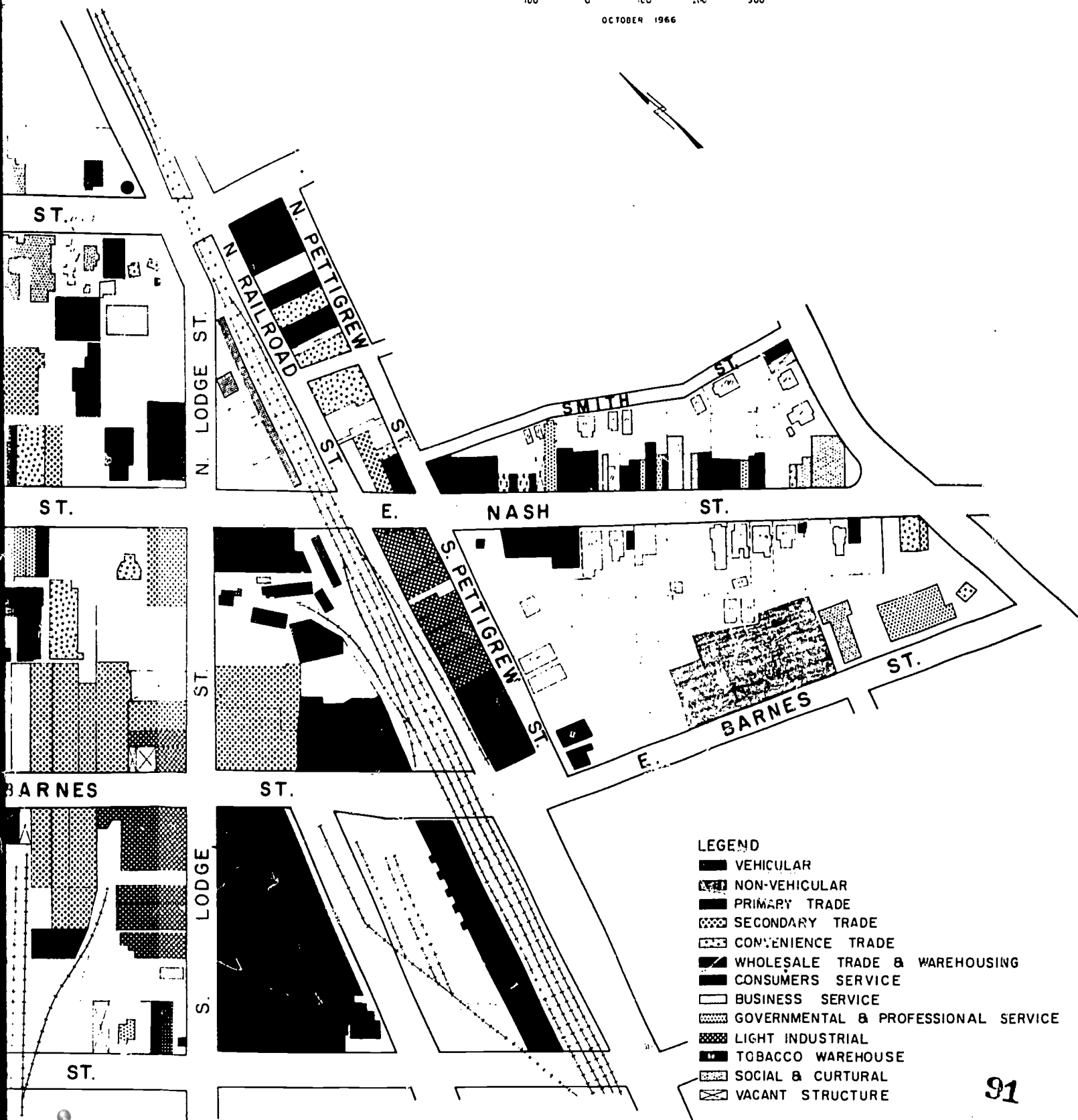


WILSON, N. C.

C. B. D. LAND USE



OCTOBER 1966



Appendix I.h. Enlarged Municipal and Suburban Supplement Map

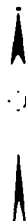
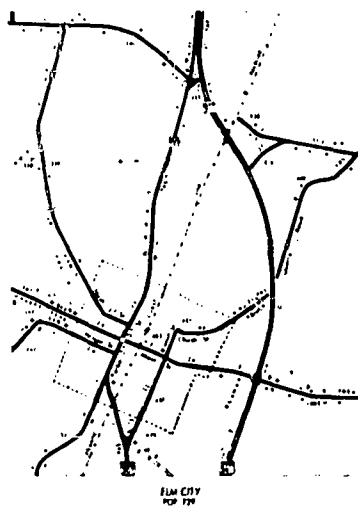
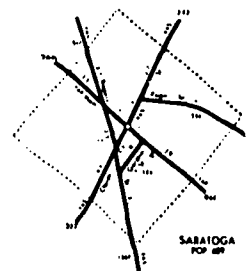
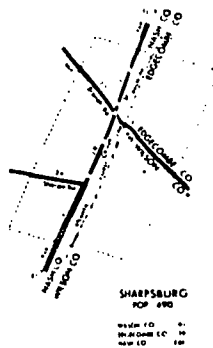
Type of map: polyconic, roadways and culture map

Area shown: the incorporated places of Wilson, Stantonsburg, Elm City, Lucama, Saratoga, Black Creek, Sims, and Sharpsburg. Each of these areas is shown in enlargement and in greater detail than their corresponding areas on the County Master Map (Appendix I.a.)

Prepared by: the North Carolina State Highways Commission in cooperation with the U. S. Department of Commerce, Bureau of Public Roads from data obtained in a state-wide highway planning survey.

Source: North Carolina State Highways Commission, Raleigh, North Carolina. No cost to project personnel.

Detail: This map shows enlargements of the inset areas on the County Master Map and is a supplement to that map. It shows in greater detail the roadway and cultural features of the incorporated places named above. In no inset enlargement is the area shown less than that of the corporate boundaries of the incorporated place. In the enlargements of Wilson, Elm City, Lucama, and Sims, a portion of the area surrounding the corporate boundaries also is included. This map was used extensively to fill in residential details of the County and City Master Maps. The use of this map and the CBD Map (Appendix I.g.) helped to make our surveys more accurate than they otherwise would have been.



NOTE: FOR CLARITY, SEE WILSON COUNTY MAP SHEET

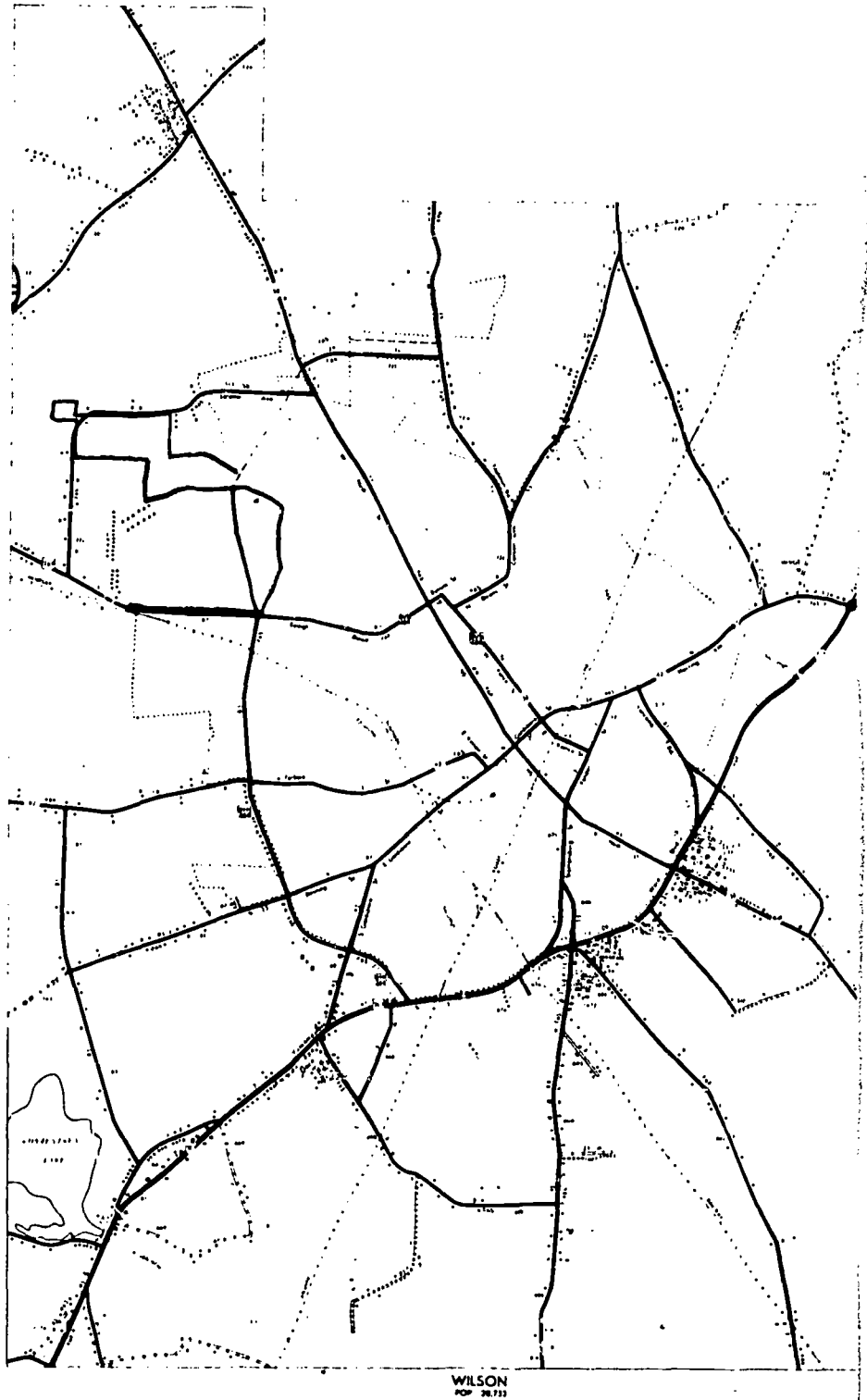
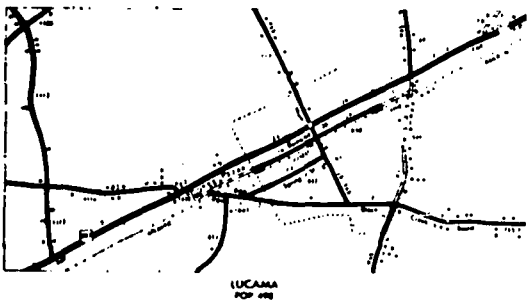
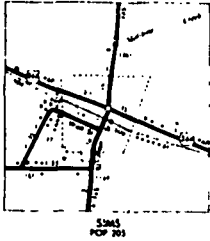
ENLARGED MUNICIPAL AND SUBURBAN AREAS
WILSON COUNTY
 NORTH CAROLINA
PREPARED BY THE
 NORTH CAROLINA STATE HIGHWAY COMMISSION
A COOPERATION WITH THE
 U.S. DEPARTMENT OF COMMERCE
 BUREAU OF PUBLIC ROADS
DATE: SEP 1955
 STATE-WIDE HIGHWAY PLANNING SURVEY



WILSON COUNTY

SHEET 2 OF 2

WILSON COUNTY NORTH CAROLINA 1955



APPENDIX II

TABLE #I. ORIGINAL AND ADJUSTED ALLOCATION OF SAMPLING UNITS TO THE STRATA IN WILSON COUNTY (SAMPLE 1.)

Stratum Place	Number of ODU's	ORIGINAL ALLOCATION			ADJUSTED ALLOCATION			OTHER DATA PROJ. 1960			TOWNSHIP DATA 1960 PROJ.		
		Number of SU's	Expected Size SU's	Expected Number of SU's	Number of SU's	Expected Size SU's	Expected Number of SU's	Population 1960	Population ODU's	Population ODU's	Twnshp. Population	Twnshp. ODU's	People ODU
Urban	886	2172	3.9991	2160	4.0213						Wilson	1210	
Rural Place	808	202	4.0000	200	4.0400						Taylor	453	
Stantons-burg	237					993	4.197				Stantons-burg	473	4.197
Elm City	156					664	4.245				Toisnot	1097	4.245
Lucama	133					539	4.003				Cross Rds.	628	4.063
Saratoga	96					444	4.611				Saratoga	537	4.611
Black Creek	71					303	4.282				Black Ck.	563	4.282
Sims	54					216	4.018				Old Fields	890	4.018
Sharpsburg	61					259	4.245				Toisnot	1097	4.245
Open Country	5805	1451	4.0007	1440	4.0313						Gardner	498	
											Spring Hill	558	
												5697	
TOTALS	15,299			3825									

TABLE #II. ADJUSTED ALLOCATION OF THE UNIVERSE AND SAMPLING UNITS TO THE STRATA IN WILSON COUNTY (SAMPLE 1.)

Stratum	Number of SU's in Universe	Sampling Rate	Number of SU's in Sample	SECOND ADJUSTMENT	Number of SU's in Universe	Sampling Rate	Number of SU's in Sample
Urban	2160	1 in 40	54		2200	1 in 25	88
Rural Place	200	1 in 40	5		200	1 in 25	8
Open Country	1440	1 in 40	36		1450	1 in 25	54
TOTALS	3800		95				150

Place	Number of ODU's	Cumulative ODU's	SU Serial Number Assigned	Urban		Rural Place		Open Country	
				SU's As Drawn	SU's In Order	SU's as Drawn	SU's in Order	SU's as Drawn	SU's in Order
Urban Wilson	8686	8686	2160 0001 - 2160	554 174	10 1569	99	29	554	10
				1837 553	63 1587	115	32	1343	63
				1343 924	68 1603	29	99	1003	68
				1487 68	75 1668	198	115	834	75
Rural Place				1603 1840	131 1695	32	198	517	131
Sharpsburg	61	61	15 001 - 015	1003 825	164 1718			870	164
Elm City	156	217	54 016 - 054	834 2122	171 1736			1258	171
Saratoga	96	313	77 056 - 077	517 1587	174 1822			513	174
Stantonsburg	237	550	136 078 - 136	1695 1668	282 1839			1174	282
				1899 1112	307 1840			872	307
Black Creek	71	621	154 137 - 154	870 1867	342 1845			1288	342
Lucama	133	754	187 155 - 187	1258 744	495 1867			164	495
Sims	54	808	200 188 - 200	513 1845	513 1899			1189	513
				1174 794	517 1905			131	517
Open Country	5805	5805	1440 0001 - 1440	872 559	554 2062			709	554
				1822 1718	559 2122			655	559
TOTALS	15,299	15,299		1288 342	637			10	637
				164 971	653			307	653
				1189 637	655			63	655
				131 2062	709			174	709
				1569 282	744			653	744
				709 1905	794			924	794
				655 455	825			68	825
				10 75	834			825	834
				307 171	862			1112	870
				63 1132	870			744	872
				1736 862	872			794	924
					924			559	971
					971			342	1003
					1003			971	1112
					1112			637	1132
					1132			282	1174
					1174			495	1189
					1189			75	1258
					1258			171	1288
					1288			1132	1343
					1343			-	1332
					1487			-	1330

TABLE #IV. ALLOCATION OF SAMPLING UNITS TO ENUMERATION DISTRICTS IN THE CITY OF WILSON (SAMPLE 1.)

Enumeration District	Number of ODU's	Cumulative ODU's	Cumulative SU's
7N	322	322	80
7P	151	473	118
8	340	813	202
9N	564	1377	342
9P	50	1427	355
10	327	1754	436
11	337	2091	520
12	174	2265	563
13	375	2640	657
14	274	2914	725
15	320	3234	804
16	439	3673	913
17N	399	4072	1013
18	389	4461	1109
19	264	4725	1174
20	245	4970	1236
21	527	5497	1367
22	431	5928	1474
23	287	6215	1546
24	307	6522	1622
25N	911	7433	1848
25P	318	7751	1927
26	594	8345	2075
27			
28S	24	8369	2081
29S	136	8505	2115
30S	40	8545	2125
31S	141	8686	2160

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 7 N; WILSON, N. C.

BLOCK 1-30	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Numbers Assigned (Within E.D. 7N)	
1	31	31	8	1-8	1-8
2	11	42	10	9-10	9-10
3	11	53	13	11-13	11-13
4	16	69	17	14-17	14-17
5	14	83	21	18-21	18-21
6	13	96	24	22-24	22-24
7	26	122	30	25-30	25-30
8	5	127	32	31-32	31-32
9	12	139	35	33-35	33-35
10	12	151	38	36-38	36-38
11	10	161	40	39-40	39-40
12	10	171	43	41-43	41-43
13	10	181	45	44-45	44-45
14	5	186	46	46	46
15	5	191	47	47	47
16	10	201	50	48-50	48-50
17	3	204	51	51	51
18	6	210	52	52	52
19	5	215	53	53	53
20	25	240	60	54-60	54-60
21	10	250	62	61-61	61-62
22	9	259	64	63-64	63-64
23	3	262	65	65	65
24	14	276	69	66-69	66-69
25	14	290	72	70-72	70-72
26	5	295	73	73) -	73
27	0	295	73	73)	
28	12	307	76	74-76	74-76
29	10	317	79	77-79	77-79
30	5	322	80	80	80

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 7 P; WILSON, N. C.

BLOCK 1-11	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	Su Serial Numbers Assigned (within E.D. 7P)	
1	27	27	7	1-7	81-87
2	21	48	12	8-12	88-92
3	12	60	15	13-15	93-95
4	4	64	16	16	96
5	18	82	20	17-20	97-100
6	7	89	22	21-22	101-102
7	3	92	23	23	103
8	19	111	28	24-28	104-108
9	17	128	32	29-32	109-112
10	13	141	35	33-35	113-115
11	10	151	38	36-38	116-118

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 8; WILSON, N. C.

BLOCK 1-18	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Numbers Assigned (within E.D. 8)	
1	5	5	1	1	119
2	8	13	3	2-3	110-111
3	22	35	9	4-9	112-117
4	17	52	13	10-13	118-121
5	31	83	21	14-21	122-129
6	23	106	26	22-26	130-134
7	28	134	33	27-33	135-141
8	54	188	47	34-47	142-155
9	22	210	52	48-52	156-160
10	3	213	53	53	161
11	4	217	54	54	162
12	21	238	59	55-59	163-167
13	24	262	65	60-65	170-175
14	30	292	73	66-73	176-183
15	25	317	79	74-79	184-189
16	10	327	81	80-81	190-191
17	9	336	84	82-84	192-194
18	4	340	85	85	195

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 9N; WILSON, N. C.

BLOCK 1-30	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Numbers Assigned (within E.D. 9N)	
1	5	5	1	1	196
2	14	19	5	2-5	197-200
3	5	24	6	6	201
4	8	32	8	7-8	202-203
5	40	72	18	9-18	204-213
6	18	90	22	19-22	214-217
7	40	130	32	23-32	218-227
8	26	156	39	33-39	228-234
9	37	193	48	40-48	235-243
10	11	204	51	49-51	244-246
11	5	209	52	52	247
12	20	229	57	53-57	248-252
13	20	249	62	58-62	253-257
14	40	289	72	63-72	258-267
15	16	305	76	73-76	268-271
16	15	320	80	77-80	272-275
17	37	357	89	81-89	276-284
18	12	369	92	90-92	285-287
19	18	387	96	93-96	288-291
20	4	391	97	97	292
21	12	403	100	98-100	293-295
22	26	429	107	101-107	296-302
23	17	446	111	108-111	303-306
24	14	460	114	112-114	307-309
25	16	476	118	115-118	310-313
26	13	489	121	119-121	314-316
27	17	506	126	122-126	317-321
28	14	520	129	127-129	322-324
29	32	552	137	130-137	325-332
30	12	564	140	138-140	333-335

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 9P; WILSON, N. C.

BLOCK 1-8	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Numbers Assigned (within E.D. 9P)	
1	7	7	2	1-2	336-337
2	8	15	4	3-4	338-339
3	5	20	5	5	340
4	5	25	6	6	341
5	8	33	8	7-8	342-343
6	4	37	9	9	344
7	5	42	10	10	345
8	8	50	12	11-12	346-347

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 10; WILSON, N. C.

BLOCK 1-13	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Numbers Assigned (within E.D. 10)	
1	23	23	6	1-6	348-353
2	21	44	11	7-11	354-358
3	33	77	19	12-19	359-366
4	34	111	28	20-28	367-375
5	21	132	33	29-33	376-380
6	56	188	47	34-47	381-394
7	3	191	48	48	395
8	20	211	52	49-52	396-399
9	27	238	59	53-59	400-406
10	15	253	63	60-63	407-410
11	34	287	71	64-71	411-418
12	23	310	77	72-77	419-424
13	17	327	82	78-81	425-428

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 11; WILSON, N. C.

BLOCK 1-17	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Numbers Assigned (within E.D. 11)	
1	19	19	5	1-5	429-433
2	23	42	10	6-10	434-438
3	11	53	13	11-13	439-441
4	6	59	15	14-15	442-443
5	21	80	20	16-20	444-448
6	38	118	29	21-29	449-457
7	20	138	34	30-34	458-462
8	24	162	40	35-40	463-468
9	29	191	48	41-48	469-476
10	15	206	51	49-51	477-479
11	13	219	54	52-54	480-482
12	23	242	60	55-60	483-488
13	10	252	63	61-63	489-491
14	17	269	67	64-67	492-495
15	11	280	70	68-70	496-498
16	43	323	80	71-80	499-508
17	14	337	84	81-84	509-512

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 12; WILSON, N. C.

BLOCK 1-13	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Numbers Assigned (within E.D. 12)	
1	17	17	4	1-4	513-516
2	12	29	7	5-7	517-519
3	34	63	16	8-16	520-528
4	5	68	17	17	529
5	8	76	19	18-19	530-531
6	15	91	23	20-23	532-535
7	13	104	26	24-26	536-538
8	14	118	29	27-29	539-541
9	14	132	33	30-33	542-545
10	7	139	35	34-35	546-547
11	8	147	37	36-37	548-549
12	13	160	40	38-40	550-552
13	14	174	43	41-43	553-555

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 13; WILSON, N. C.

BLOCK 1-24	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Numbers Assigned (within E.D. 13)	
1	22	22	5	1-5	556-560
2	14	36	9	6-9	561-564
3	7	43	11	10-11	565-566
4	9	52	13	12-13	567-568
5	36	88	22	14-22	569-577
6	9	97	24	23-24	578-579
7	3	100	25	25	580
8	7	107	27	26-27	581-582
9	24	131	33	28-33	583-588
10	11	142	35	34-35	589-590
11	12	154	38	36-38	591-593
12	12	166	41	39-41	594-596
13	14	180	45	42-45	597-600
14	27	207	51	46-51	601-606
15	34	241	60	52-60	607-615
16	17	258	64	61-64	616-619
17	12	270	67	65-67	620-622
18	13	283	70	68-70	623-625
19	17	300	75	71-75	626-630
20	21	321	80	76-80	631-635
21	20	341	85	81-85	636-640
22	11	352	88	86-88	641-643
23	10	362	90	89-90	644-645
24	13	375	93	91-93	646-648

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 14; WILSON, N. C.

BLOCK 1-7	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Number Assigned (within E.D. 14)
1	3	3	1	1 649
2	45	48	12	2-12 650-660
3	66	114	28	13-28 661-676
4	37	151	38	29-38 677-686
5	46	197	49	39-49 687-697
6	36	233	58	50-58 698-706
7	41	274	68	59-68 707-716

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 15; WILSON, N. C.

BLOCK 1-20	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Number Assigned (within E.D. 15)
1	16	16	4	1-4 717-720
2	15	31	8	5-8 721-724
3	11	42	10	9-10 725-726
4	12	54	13	11-13 727-729
5	17	71	18	14-18 730-734
6	14	85	21	19-21 735-737
7	33	118	29	22-29 738-745
8	30	148	37	30-37 746-753
9	13	161	40	38-40 754-758
10	6	167	42	41-42 759-760
11	10	177	44	43-44 761-762
12	12	189	47	45-47 763-765
13	35	224	56	48-56 766-774
14	9	233	58	57-58 775-776
15	16	249	62	59-62 777-780
16	25	274	68	63-68 781-786
17	19	293	73	69-73 787-791
18	6	299	74	74 792
19	14	313	78	75-78 793-796
20	7	320	80	79-80 797-798

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Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 16; WILSON, N. C.

BLOCKS 1-30	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Number Assigned (within E.D. 16)
1	12	12	3	1-3 799-801
2	14	26	6	4-6 802-804
3	21	47	12	7-12 805-810
4	10	57	14	13-14 811-812
5	20	77	19	15-19 813-817
6	6	83	21	20-21 818-819
7	13	96	24	22-24 820-822
8	20	116	29	25-29 823-827
9	21	137	34	30-34 828-832
10	9	146	36	35-36 833-834
11	21	167	42	37-42 835-840
12	18	185	46	43-46 841-844
13	24	209	52	47-52 845-850
14	23	232	58	53-58 851-856
15	9	241	60	59-60 857-858
16	7	248	62	61-62 859-860
17	9	257	64	63-64 861-862
18	8	265	66	65-66 863-864
19	20	285	71	67-71 865-869
20	10	295	73	72-73 870-871
21	12	307	76	74-76 872-874
22	8	315	78	77-78 875-876
23	19	334	83	79-83 877-881
24	10	344	86	84-86 882-884
25	21	365	91	87-91 885-889
26	24	389	97	92-97 890-895
27	7	396	98	98 896
28	17	413	103	99-103 897-901
29	11	424	105	104-105 902-903
30	15	439	109	106-109 904-907

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 17N; WILSON, N. C.

BLOCKS 1-37	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Number Assigned (within E.D. 17N)	
1	11	11	3	1-3	908-910
2	4	15	4	4	911
3	26	41	10	5-10	912-917
4	14	55	14	11-14	918-921
5	5	60	15	15	922
6	13	73	18	16-18	923-925
7	18	91	23	19-23	926-930
8	13	104	25	24-26	931-933
9	6	110	27	27	934
10	15	125	31	28-31	935-938
11	5	130	32	32	939
12	10	140	35	33-35	940-942
13	14	154	38	36-38	943-945
14	10	164	41	39-41	946-948
15	10	174	43	42-43	949-950
16	5	179	45	44-45	951-952
17	15	194	48	46-48	953-955
18	14	208	52	49-52	956-959
19	7	215	53	52-53	960-961
20	22	237	59	54-59	962-967
21	6	243	60	60	968
22	13	256	64	61-64	969-972
23	14	270	67	65-67	973-975
24	7	277	69	68-69	976-977
25	9	286	71	70-71	978-979
26	9	295	73	72-73	980-981
27	15	310	77	74-77	982-985
28	9	319	79	78-79	986-987
29	9	328	82	80-82	988-990
30	2	330	82	82	991
31	23	353	83	83	992
32	7	360	90	84-90	993-999
33	16	376	94	91-94	1000-1003
34	5	381	95	95	1004
35	7	388	96	96	1005
36	6	394	98	97-98	1006-1007
37	5	399	99	99	1008

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 18; WILSON, N. C.

BLOCKS 1-28	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Number Assigned (within E.D. 18)
1	10	10	2	1-2 1009-1010
2	9	19	5	3-5 1011-1013
3	19	38	9	6-9 1014-1017
4	13	51	13	10-13 1018-1021
5	11	62	15	14-15 1022-1024
6	24	86	21	16-21 1025-1030
7	17	103	26	22-26 1031-1035
8	18	121	30	27-30 1036-1039
9	31	152	38	31-38 1040-1047
10	11	163	41	39-41 1048-1050
11	12	175	44	42-44 1051-1053
12	10	185	46	45-46 1054-1055
13	13	198	49	47-49 1056-1058
14	15	213	53	50-53 1059-1062
15	15	228	57	54-57 1063-1066
16	13	241	60	58-60 1067-1069
17	13	254	63	61-63 1070-1072
18	8	262	65	64-65 1073-1074
19	15	277	69	66-69 1075-1078
20	8	285	71	70-71 1079-1080
21	14	299	74	72-74 1081-1083
22	18	317	79	75-79 1084-1088
23	26	343	85	80-85 1089-1094
24	12	355	88	86-88 1095-1097
25	9	364	91	89-91 1098-1100
26	11	375	93	92-93 1101-1102
27	11	386	96	94-96 1103-1105
28	3	389	97	97 1106

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 19; WILSON, N. C.

BLOCKS 1-17	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Number Assigned (within E.D. 19)
1	26	26	6	1-6 1107-1112
2	11	37	9	7-9 1113-1115
3	12	49	12	10-12 1116-1118
4	9	58	14	13-14 1119-1120
5	14	72	18	15-18 1121-1124
6	15	87	22	19-22 1125-1128
7	13	100	25	23-25 1129-1131
8	6	106	26	26 1132
9	33	139	35	27-35 1133-1141
10	4	143	36	36 1142
11	35	178	44	37-44 1143-1150
12	24	202	50	45-50 1151-1156
13	3	205	51	51 1157
14	3	208	52	52 1158
15	24	232	58	53-58 1159-1164
16	13	245	61	59-61 1165-1167
17	19	264	66	62-66 1168-1172

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 20; WILSON, N. C.

BLOCKS 1-13	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Number Assigned (within E.D. 20)
1	31	31	8	1173-1180
2	13	44	11	1181-1183
3	18	62	15	1184-1187
4	10	72	18	1188-1190
5	18	90	22	1191-1194
6	18	108	27	1195-1199
7	14	122	30	1200-1202
8	18	140	35	1203-1207
9	20	160	40	1208-1212
10	7	167	42	1213-1214
11	18	185	46	1215-1218
12	37	222	55	1219-1227
13	23	245	61	1228-1233

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 21; WILSON, N. C.

BLOCKS 1-33	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Number Assigned (within E.D. 21)
1	7	7	2	1-2 1234-1235
2	42	49	12	3-12 1236-1245
3	3	52	13	13 1246
4	17	69	17	14-17 1247-1250
5	7	76	19	18-19 1251-1252
6	19	95	24	20-24 1253-1257
7	13	108	27	25-27 1258-1260
8	7	115	29	28-29 1261-1262
9	11	126	31	30-31 1263-1264
10	13	139	35	32-35 1265-1268
11	46	185	46	36-46 1269-1279
12	11	196	49	47-49 1280-1282
13	10	206	51	50-51 1283-1284
14	12	218	54	52-54 1285-1287
15	15	233	58	55-58 1288-1291
16	12	245	61	59-61 1292-1294
17	16	261	65	62-65 1295-1298
18	22	283	70	66-70 1299-1303
19	12	295	73	71-73 1304-1306
20	19	314	78	74-78 1307-1311
21	12	326	81	79-81 1312-1314
22	31	357	89	82-89 1315-1322
23	13	370	92	90-92 1323-1325
24	16	386	96	93-96 1326-1329
25	5	391	97	97 1330
26	22	413	103	98-103 1331-1336
27	8	421	105	104-105 1337-1338
28	16	437	109	106-109 1339-1342
29	21	458	114	110-114 1343-1347
30	13	471	117	115-117 1348-1350
31	20	491	122	118-122 1351-1355
32	8	499	124	123-124 1356-1357
33	28	527	131	125-131 1358-1364

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 22; WILSON, N. C.

BLOCKS 1-17	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Number Assigned (within E.D. 22)	
1	5	5	1	1	1365
2	7	12	3	2-3	1366-1367
3	14	26	6	4-6	1368-1370
4	28	54	13	7-13	1371-1377
5	18	72	18	14-18	1378-1382
6	13	85	21	19-21	1383-1385
7	15	100	25	22-25	1386-1389
8	23	123	31	26-31	1390-1395
9	21	144	36	32-36	1396-1400
10	27	171	43	37-43	1401-1407
11	15	186	46	44-46	1408-1410
12	20	206	51	47-51	1411-1415
13	46	252	63	52-63	1416-1427
14	73	325	81	64-81	1428-1445
15	75	400	99	82-99	1446-1463
16	20	420	104	100-104	1464-1468
17	11	431	107	105-107	1469-1471

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 23; WILSON, N. C.

BLOCKS 1-18	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Number Assigned (within E.D. 23)	
1	9	9	2	3-2	1472-1473
2	6	15	4	3-4	1474-1475
3	8	23	6	5-6	1476-1477
4	8	31	8	7-8	1478-1479
5	5	36	9	9	1480
6	19	55	14	10-14	1481-1485
7	15	70	17	15-17	1486-1488
8	34	104	26	18-26	1489-1497
9	16	120	30	27-30	1498-1501
10	14	134	33	31-33	1502-1504
11	3	137	34	34	1505
12	14	151	38	35-38	1506-1509
13	12	163	42	39-42	1510-1512
14	14	177	44	43-44	1513-1515
15	4	181	45	45	1516
16	39	220	55	46-55	1517-1526
17	57	277	69	56-69	1527-1540
18	10	287	71	70-71	1541-1542

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 24; WILSON, N. C.

BLOCK 1-21	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Numbers Assigned (Within E.D. 24)
1	6	6	1	1543
2	24	30	7	1544-1549
3	4	34	8	1550
4	11	45	11	1551-1553
5	6	51	13	1554-1555
6	13	64	16	1556-1558
7	13	77	19	1559-1561
8	45	122	30	1562-1572
9	6	128	32	1573-1574
10	18	146	36	1575-1578
11	30	176	44	1579-1586
12	10	186	46	1587-1588
13	6	192	48	1589-1590
14	8	200	50	1591-1592
15	23	223	55	1593-1597
16	22	245	61	1598-1603
17	15	260	65	1604-1607
18	17	277	69	1608-1611
19	10	287	71	1612-1613
20	10	297	74	1614-1616
21	10	307	76	1617-1618

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 25N; WILSON, N. C.

BLOCK	Number of 1-53 ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Number Assigned (Within E.D. 25N)
1	19	19	6	1-6 1619-1624
2	15	34	8	7-8 1625-1626
3	27	61	15	9-15 1627-1633
4	28	89	22	16-22 1634-1640
5	20	109	27	23-27 1641-1645
6	16	125	31	28-31 1646-1649
7	62	187	47	32-47 1650-1665
8	13	200	50	48-50 1666-1668
9	23	223	55	51-55 1669-1673
10	41	264	66	56-66 1674-1684
11	13	277	69	67-69 1685-1687
12	12	289	72	70-72 1688-1690
13	8	297	74	73-74 1691-1692
14	11	308	77	75-77 1693-1695
15	13	321	80	78-80 1696-1698
16	3	324	81	81 1699
17	8	332	83	82-83 1700-1701
18	5	337	84	84 1702
19	6	343	85	85 1703
20	16	359	89	86-89 1704-1707
21	15	374	93	90-93 1708-1711
22	28	402	100	94-100 1712-1718
23	24	426	106	101-106 1719-1724
24	25	451	112	107-112 1725-1730
25	30	481	120	113-120 1731-1738
26	23	504	125	121-125 1739-1743
27	11	515	128	126-128 1744-1746
28	14	529	132	129-132 1747-1750
29	24	553	138	133-138 1751-1756
30	38	591	147	139-147 1757-1765
31	5	596	148	148 1766
32	18	614	153	149-153 1767-1771
33	24	638	159	154-159 1772-1777
34	6	644	160	160 1778
35	10	654	163	161-163 1779-1781
36	10	664	165	164-165 1782-1783
37	18	682	170	166-170 1784-1788
38	22	704	175	171-175 1789-1793
39	11	715	178	176-178
40	7	722	180	179-180
41	15	737	183	181-183
42	13	750	187	184-187
43	19	769	191	188-191
44	16	785	195	192-195
45	14	799	199	196-199
46	8	807	201	200-201
47	10	817	203	202-203

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 25N; WILSON, N. C.

BLOCK	1-53	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Number Assigned (Within E.D. 25N)
48	9		826	205	204-205
49	21		847	211	206-211
50	9		856	213	212-213
51	42		898	223	214-223
52	8		906	225	224-225
53	5		911	227	226-227

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 25P; WILSON, N. C.

BLOCK	1-21	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Number Assigned (Within E.D. 25P)
1	35		35	9	1-9 1794-1802
2	11		46	11	10-11 1803-1804
3	6		52	13	12-13 1805-1806
4	8		60	15	14-15 1807-1808
5	8		68	17	16-17 1809-1810
6	27		95	24	18-24 1811-1817
7	17		112	28	25-28 1818-1821
8	30		142	35	29-35 1822-1828
9	32		174	43	36-43 1829-1836
10	31		205	51	44-51 1837-1844
11	12		217	54	52-54 1845-1847
12	11		228	57	55-57 1848-1850
13	12		240	60	58-60 1851-1853
14	5		245	61	61 1854
15	12		257	64	62-64 1855-1857
16	7		264	66	65-66 1858-1859
17	10		274	68	67-68 1860-1861
18	0		274	68	68 1862
19	16		290	72	69-72 1863-1866
20	14		304	76	73-76 1867-1870
21	14		318	79	77-79 1871-1873

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 26; WILSON, N. C.

BLOCK	Number of 1-47 ODU'S	Cumulative ODU'S	Cumulative SU's	SU Serial Number Assigned (Within E.D. 26)
1	5	5	1	1874
2	21	26	6	1875-1879
3	18	44	11	1880-1884
4	12	56	14	1885-1887
5	16	72	18	1888-1891
6	16	88	22	1892-1895
7	16	104	26	1896-1899
8	7	111	28	1900-1901
9	4	115	29	1902
10	4	119	30	1903
11	5	124	31	1904
12	5	129	32	1905
13	0	129	32	1905
14	11	140	35	1906-1908
15	45	185	46	1909-1919
16	22	207	51	1920-1924
17	8	215	53	1925-1926
18	10	225	56	1927-1929
19	6	231	57	1930
20	16	247	61	1931-1934
21	10	257	64	1935-1937
22	19	276	69	1938-1942
23	10	286	71	1943-1944
24	17	303	75	1945-1948
25	9	312	78	1949-1951
26	9	321	80	1952-1953
27	13	334	83	1954-1956
28	10	344	86	1957-1959
29	8	352	88	1960-1961
30	15	367	91	1962-1964
31	8	375	93	1965-1966
32	9	384	95	1967-1968
33	27	411	102	1969-1975
34	8	419	104	1976-1977
35	13	432	107	1978-1980
36	15	447	111	1981-1984
37	11	458	114	1985-1987
38	18	476	118	1988-1991
39	6	482	120	1992-1993
40	5	487	121	1994
41	10	497	124	1995-1997
42	17	514	128	1998-2001
43	21	535	133	2002-2006
44	13	548	136	2007-2009
45	12	560	139	2010-2012
46	14	574	143	2013-2016
47	20	594	148	2017-2021

Table #V ALLOCATION OF SAMPLING UNITS TO BLOCKS IN E.D. 28S; WILSON, N. C.

BLOCK 1-5	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Number Assigned (Within E.D. 28S)	
1	5	5	1	1	2022
2	3	8	2	2	2023
3	5	13	3	3	2024
4	7	20	5	4-5	2025-2026
5	4	24	6	6	2027

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 29S; WILSON, N. C.

BLOCK 1-18	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Number Assigned (Within E.D. 29S)	
1	3	3	1	1	2028
2	23	26	6	2-6	2029-2033
3	5	31	8	7-8	2034-2035
4	9	40	10	9-10	2036-2037
5	4	44	11	11	2038
6	4	48	12	12	2039
7	7	55	14	13-14	2040-2041
8	9	64	16	15-16	2042-2043
9	6	70	17	17	2044
10	9	79	20	18-20	2045-2047
11	7	86	21	21	2048
12	9	95	24	22-24	2049-2051
13	14	109	27	25-27	2052-2054
14	3	112	28	28	2055
15	6	118	30	29-30	2056-2057
16	9	127	32	31-32	2058-2059
17	5	132	33	33	2060
18	4	136	34	34	2061

TABLE #VI. ALLOCATION OF SAMPLING UNITS TO DIVISIONS IN THE OPEN COUNTRY; WILSON COUNTY (SAMPLE 1)

Division	Section	INOD		CUMULATIVE INOD		CUMULATIVE SU's		Serial Numbers
		Block	Div.	Sect.	Block	Div.	Sect.	
1	A	839			839		207	
			225			225	56	1 - 3
				13				4 - 24
				82				25 - 34
				41				35 - 45
				46				46 - 52
				26				53 - 56
1	B			17				
1	C							
1	D							
1	E							

Division Section	INOD		CUMULATIVE INOD		CUMULATIVE SU's		Serial Numbers
	Block	Div. Sect.	Div. Sect.	Block	Div. Sect.	Block	
2 A	1 2 3 4 5 6 7 8 9	794	221	23 41 14 12 15 11 32 22 51	1634	1057	859 900 914 926 941 952 984 1006 1057
2 B	1 2 3 4	196	1253	1087 1124 1176 1253	311	270 279 292 311	213 223 227 230 233 236 244 250 262
2 C	1 2 3 4	139	1392	1280 1344 1347 1392	345	318 333 334 345	208 - 213 214 - 223 etc.
2 D	1	91	1483	1483	368	368	
2 E	1	147	1634	1634	405	405	

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Division	Section	INOD		CUMULATIVE INOD		CUMULATIVE SU'S	
		Block	Div. Sect. Block	Div. Sect. Block	Div. Sect. Block	Div. Sect. Block	Div. Sect. Block
3	A		427		2061	511	
		1	112		1746		433
		2		29			413
		3		39			422
				44			433
3	B						
		1	107		1853	460	
		2		13			436
		3		20			441
		4		61			456
				13			460
3	C						
		1	79		1932	479	479
3	D						
		1	42		1974	490	490
3	E						
		1	194		2061	511	511
				194	2061		

Division	INOD			CUMULATIVE INOD			CUMULATIVE SU's		
	Section	Block	Div.	Sect.	Block	Div.	Sect.	Block	
4 A	A	1	451	130	2512	2191	623	543	515 518 520 534 536 539 540 543
4 B	B	1	83		2274	2243 2262 2274	564	556 561 564	
4 C	C	1	61		2535	2321 2335	579	576 579	
4 D	D	1	72		2407	2407	597	597	
4 E	E	1	98		2512	2512	623	623	

Division	Section	INOD		CUMULATIVE INOD		CUMULATIVE SU's	
		Div.	Sect.	Div.	Sect.	Div.	Sect.
Block	Block	Div.	Sect.	Div.	Sect.	Div.	Sect.
5	A	623	192	3135	2704	778	671
	1				2548		632
	2				2584		641
	3				2639		655
	4				2654		658
	5				2679		665
	6				2689		667
	7				2704		671
5	B		180	2884		715	
	1				2737		679
	2				2759		684
	3				2786		691
	4				2801		695
	5				2815		698
	6				2864		710
	7				2884		715
5	C		72	2956		733	
	1				2948		731
	2				2956		733
5	D		104	3060		759	
	1				3023		750
	2				3045		755
	3				3060		759
5	E		67	3135		778	
	1				3135		778

Division	Section	INOD		CUMULATIVE INOD		CUMULATIVE SU's	
		Div.	Sect.	Div.	Sect.	Div.	Sect.
6	A	1364	274	4499	3409	1116	846
6	B	470	16	3879	962	850	869
6	C	334	66	4213	1045	979	995

Division	Section	INOD		CUMULATIVE INOD		CUMULATIVE SU's	
		Block	Div. Sect. Block	Div. Sect. Block	Div. Sect. Block	Div. Sect. Block	Div. Sect. Block
6	D						
			186			1091	
		1		4399	4240		1052
		2			4269		1059
6	E						
			80				
		1		4499	4499	1116	1116
7	A		984				
			166				
				5483		1360	
				4665		1157	
		1			4511		1119
		2			4519		1121
		3			4564		1132
		4			4579		1136
7	B						
			111			1185	
		1		4776	4685		1162
		2			4742		1176
7	C						
			219				
				4995		1239	
		1			4801		1191
		2			4826		1197
		3			4906		1217
		4			4947		1227
		5			4973		1234
7							

Division	Section	INOD		CUMULATIVE INOD		CUMULATIVE SU's	
		Div.	Sect.	Div.	Sect.	Div.	Sect.
Block	Block	Div.	Sect.	Div.	Sect.	Div.	Sect.
7	D		183		5178		1284
	1				5059		1255
	2				5116		1269
	3				5150		1278
	4				5178		1284
7	E		224		5483		1360
	1				5483		1360
8	A	389	69	5880	5552	1459	1377
	1				5505		1366
	2				5552		1377
8	B		129		5681		1409
	1				5573		1382
	2				5604		1390
	3				5634		1398
	4				5659		1404
	5				5681		1409
8	C		65		5746		1425
	1				5716		1418
	2				5746		1425
8	D		34		5780		1434
	1				5756		1428
	2				5780		1434
8	E		92		5880		1459
	1				5880		1459

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TABLE VII. INTERVIEWERS & AREAS (SAMPLE 1)

Area Code	Interviewer's Name	Primary Sampling Units		Reserve Sampling Units	
A.	Mary Barnes	307	825	924	929
B.	Mrs. Johnnie B. Harris	870	1112	1501	794
C.	Barbara Edith Baldwin	63	495	502	374
D.	Lettie Ricks	459	513	548	554
E.	Jennifer Taylor	610	637	653	655
F.	Inez Weaver	588	1258	1288	1301
G.	Robert M. Jackson	1569	1587	1695	1822
H.	Nancy Pruden	342	834	883	282
I.	Nancy Pruden	10	164	174	22
J.	Blanche F. Taylor	75	495	517	78
K.	Clyde Joan Harris	709	1132	1212	872
L.	Annie Johnson	1288	1302	1343	68
M.	J. B. Harris & B. Baldwin	1487	1998	2062	1932
N.	Robert Jackson	946	1899	2122	1867
O.	Mary Barnes	854	862	1028	852
P.	Elizabeth Yelverton	1092	1769	1845	1784
Q.	Robert Jackson	1003	1614	1665	1603
R.	Robert Jackson	1596	1678	1718	1736
I.	Mrs. Elizabeth Yelverton	554 ^R	652	744	653
II.	Mr. A. L. Yelverton	22 ^R	38 ^R	548	559
III.	Alice Orr	14 ^R	1432	1343	17 ^R
IV.	Dale Orr	1174	1216	1189	1258
V.	Danny Ray Williamson	1112	1014	924	1003
VI.	Arlein Pearce	829	834	938	845
VII.	Stella King	870	872	968	794
VIII.	D. R. Williamson	517	637	709	655
IX.	Yelvertons	11 ^R	1132	796	1130
X.	Dale Orr	75	131	141	10
XI.	Alice Orr	282	164	171	174
XII.	A. L. Yelverton	342	423	459	458

000^V = County Sampling Units assigned to Urban Interviewers or to County Interviewers Close to Wilson.

000^X = Must Share

000^R = Rural Place SU's.

APPENDIX III

TABLE # I. ORIGINAL AND ADJUSTED ALLOCATION OF SAMPLING UNITS TO THE STRATA IN WILSON COUNTY (SAMPLE 2.)

Stratum Place	Number of ODU'S	ORIGINAL ALLOCATION		ADJUSTED ALLOCATION		OTHER DATA		TOWNSHIP DATA		
		Number of SU'S	Expected Size SU'S	Number of SU'S	Expected Size SU'S	Population	People ODU	Twship. Population	Twship. ODU'S	People ODU
Urban Wilson	8686	1726	4.99882	1700	5.0165			Wilson	1210	
Rural Place Stantonsburg	808	161	4.98765	160	5.9250	993	4.197	Taylor Stantons- burg	453 473	4.197
Elm City	156	31	5.03225	40	3.9000	664	4.245	Toisnot	1097	4.245
Lucama	133	27	4.92592	20	6.6500	539	4.063	Cross Rds.	628	4.063
Saratoga	96	19	5.05263	20	4.8000	444	4.611	Saratoga	537	4.611
Black Creek	71	14	5.07142	20	3.5500	303	4.262	Black Ck.	563	4.262
Sims	54	11	4.90909	20	2.7000	216	4.018	Old Fields	890	4.018
Tharpsburg	61	12	5.08333	20	3.0500	259	4.245	Toisnot	1097	4.245
Open Country	5862	1172	5.00170	1180	4.9678			Gardner Spring Hill	498 558	
TOTALS	15,356	3059		3040					5697	

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TABLE #II. ADJUSTED ALLOCATION OF THE UNIVERSE AND SAMPLING UNITS TO THE STRATA IN WILSON COUNTY (SAMPLE 2.)

Stratum	Number of SU's In Universe	Sampling Rate	Number of SU's In Sample
Urban	1700	1:20	85
Rural Place	160	1:20	8
Open Country	1190	1:20	59
TOTAL	3040		

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TABLE # III. ALLOCATION OF SAMPLING UNITS TO PLACES IN WILSON COUNTY (SAMPLE 2)

Place	Number of ODU's	Cumulative ODU's	Cumulative SU's	SU Serial No. Assigned	Urban SU's		Urban SU's		Rural Place SU's		Open Country SU's	
					As Drawn	In Order	As Drawn	In Order	As Drawn	In Order	As Drawn	In Order
Urban	8528	8528	1700	1-1700	554 1003 1222	10 559 971	102 153	3 15	249 247	11 574	249 247	11 574
Wilson					1487 1258 1614	22 566 1003	153		1126 432	29 588	1126 432	29 588
Rural Place					1174 1189 1678	47 588 1028			541 391	53 603	541 391	53 603
Sharpsburg					709 825 548	63 1020 1030			217 583	64 612	217 583	64 612
Elm City	61	217	20	1-20	924 1658 610	68 604 1037			1060 532	69 617	1060 532	69 617
Saratoga	156	313	80	21-80	1132 75 374	75 610 1112			879 824	109 620	879 824	109 620
Stantonsburg	96	313	80	81-120	1603 174 78	78 637 1132			121 1074	121 639	121 1074	121 639
Black Creek	237	550	120	121-140	1288 653 1301	131 653 1174			603 639	131 681	603 639	131 681
Lucama	71	621	140	141-160	131 342 852	164 655 1189			574 271	146 720	574 271	146 720
Sims	133	754	160	161-180	10 171 22 171	709 1222			722 1047	150 722	722 1047	150 722
Open Country	54	808	180	1-1180	63 1343 284 174	744 1258			146 959	217 737	146 959	217 737
	5862	5862	1180		1112 834 1437 222	751 1288			501 1000	218 751	501 1000	218 751
					344 1695 1037 264	754 1301			974 1095	231 801	974 1095	231 801
					971 518 1028 282	756 1343			53 131 233 824		53 131 233 824	
					68 1587 1501 307	794 1437			423 737 247 827		423 737 247 827	
					517 1030 1596	342 825 1487			925 342 249 879		925 342 249 879	
					164 1665 1562 368	830 1501			540 751 271 886		540 751 271 886	
					559 830 754 374	834 1562			488 276 276 925		488 276 276 925	
					495 946 459 400	852 1569			720 218 342 948		720 218 342 948	
					870 427 963 427	854 1587			29 986 359 959		29 986 359 959	
					872 499 222 459	859 1596			801 64 387 974		801 64 387 974	
					1569 604 916 466	862 916			69 620 391 986		69 620 391 986	
					307 927 368 495	870 1603			109 617 423 1000		109 617 423 1000	
					588 756 499 872	1614			359 231 432 1022		359 231 432 1022	
					637 1020 400 513	883 1665			948 681 488 1047		948 681 488 1047	
					655 883 566 517	924 1668			233 827 501 1060		233 827 501 1060	
					282 854 751 548	927 1678			612 150 515 1074		612 150 515 1074	
					862 466 859 554	946 1695			11 886 532 1095		11 886 532 1095	
					47	963			387 515	541 1130	387 515	541 1130

TABLE # IV. ALLOCATION OF SAMPLING UNITS TO ENUMERATION DISTRICTS IN THE CITY OF WILSON

Enumeration District	Number of ODU's	Cumulative ODU's	Cumulative SU's	Su Serial No. Assigned	SU Drawn in Random Draw	
					As Drawn	In Order
7N	203	203	41	1-41	10 559	963
7P	309	512	103	42-103	22 566	971
8	343	855	172	104-172	47 588	1003
8N	495	1350	270	173-270	63 604	1020
9P	54	1404	281	271-281	68 610	1028
10	298	1702	341	282-341	75 637	1030
11	332	2034	407	342-407	78 653	1037
12	175	2209	442	408-442	131 655	1112
13	374	2583	517	443-517	164 709	1132
14	253	2836	568	518-568	171 744	1174
15	326	3162	633	569-633	174 751	1189
16	414	3576	716	634-716	222 754	1222
17N	412	3988	809	717-809	264 756	1258
18	385	4373	886	810-886	282 794	1288
19	263	4636	929	887-929	307 825	1301
20	246	4882	978	930-978	342 830	1343
21	540	5422	1086	979-1086	368 834	1437
22	433	5855	1163	1087-1163	374 852	1487
23	230	6085	1209	1164-1209	400 854	1501
24	294	6379	1268	1210-1268	427 859	1562
25N	1179	7558	1505	1269-1505	459 862	1569
25P	216	7774	1538	1506-1538	466 870	1587
26	595	8369	1647	1539-1647	495 872	1596
28S	25	8394	1652	1648-1652	499 883	1603
29S	135	8529	1681	1653-1681	513 916	1614
					517 924	1665
					548 927	1668
					554 946	1695

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 7N; WILSON, N. C.

BLOCK 1-19	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Numbers Assigned (within E.D. 7N)	
1	5	5	1	1	1
2	11	16	3	2-3	2-3
3	12	28	6	4-6	4-6
4	10	38	8	7-8	7-8
5	10	48	10	9-10	9-10
6	10	58	12	11-12	11-12
7	5	63	13	13	13
8	5	68	14	14	14
9	10	78	15	16	16
10	9	87	17	17	17
11	15	102	20	18-20	18-20
12	10	112	22	21-22	21-22
13	22	134	27	23-27	23-27
14	8	142	28	28	28
15	13	155	31	29-31	29-31
16	11	166	33	32-33	32-33
17	5	171	34	34	34
18	28	199	40	35-40	35-40
19	4	203	41	41	41

Table #7 ALLOCATION OF SU'S TO BLOCKS IN E.D. 7P; WILSON, N. C.

BLOCK 1-18	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Numbers Assigned (within E.D. 7P)	
1	28	28	7	1-7	42-48
2	21	49	10	8-10	49-51
3	12	61	12	11-12	52-53
4	4	65	13	13	54
5	29	94	19	14-19	55-60
6	14	108	22	20-22	61-63
7	13	121	24	23-24	64-65
8	26	147	29	25-29	66-70
9	26	173	35	30-35	71-76
10	25	198	40	36-40	77-81
11	17	215	43	41-43	82-84
12	13	228	46	44-46	85-87
13	11	239	48	47-48	88-89
14	15	254	51	49-51	90-92
15	9	263	53	52-53	93-94
16	16	279	56	54-56	95-97
17	17	296	59	57-59	98-100
18	13	309	62	60-62	101-103

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 8; WILSON, N. C.

BLOCK 1-14	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Numbers Assigned (within E.D. 8)	
1	8	8	2	1-2	104-105
2	21	29	6	3-6	106-109
3	24	53	11	7-11	110-114
4	30	83	17	12-17	115-120
5	12	95	19	18-19	121-122
6	10	105	21	20-21	123-124
7	23	128	26	22-26	125-129
8	48	176	35	27-35	130-138
9	23	199	40	36-40	139-143
10	27	226	45	41-45	144-148
11	59	285	57	46-57	149-160
12	22	307	61	58-61	161-164
13	31	338	68	62-68	165-171
14	5	343	69	69	172

Table #V ALLOCATION OF SU'S TO BLOCK IN E.D. 9N; WILSON, N. C.

BLOCK 1-25	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Number Assigned (within E.D. 9N)	
1	7	7	1	1	173
2	7	14	2	2	174
3	17	31	6	3-6	175-178
4	66	97	19	7-19	179-191
5	41	138	28	20-28	192-200
6	37	175	35	29-35	201-207
7	16	191	38	36-38	208-210
8	20	211	42	39-42	211-214
9	20	231	46	43-46	215-218
10	38	269	54	47-54	219-226
11	12	281	56	55-56	227-228
12	18	299	60	57-60	229-232
13	4	303	61	61	233
14	12	315	63	62-63	234-235
15	15	330	66	64-66	236-238
16	11	341	68	67-68	239-240
17	10	351	70	69-70	240-241
18	14	365	73	71-73	242-244
19	16	381	76	74-76	245-247
20	13	394	79	77-79	248-250
21	17	411	82	80-82	251-253
22	14	425	85	83-85	254-256
23	26	451	90	86-90	257-261
24	32	483	97	91-97	262-268
25	12	495	99	98-99	269-270

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 9P; WILSON, N. C.

BLOCK 1-9	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Number Assigned (within E.D. 9P)	
1	6	6	1	1	271
2	5	11	2	2	272
3	8	19	4	3-4	273-274
4	5	24	5	5	275
5	6	30	6	6	276
6	4	34	7	7	277
7	8	42	8	8	278
8	4	46	9	9	279
9	8	54	11	10-11	280-281

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 10; WILSON, N. C.

BLOCK 1-11	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Number Assigned (within E.D. 10)	
1	23	23	5	1-5	282-286
2	20	43	9	6-9	287-290
3	33	76	15	10-15	291-296
4	36	112	22	16-22	297-303
5	31	143	29	23-29	304-310
6	56	199	40	30-40	311-321
8	5	224	45	45	326
9	34	258	52	46-52	327-333
10	23	281	56	53-56	334-337
11	17	298	60	57-60	338-341

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 11; WILSON, N. C.

BLOCK 1-15	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Number Assigned (within E.D. 11)
1	19	19	4	1-4 342-345
2	23	42	8	5-8 346-349
3	11	53	11	9-11 350-352
4	6	59	12	12 353
5	21	80	16	13-16 354-357
6	38	118	24	17-24 358-365
7	20	138	28	25-28 366-369
8	24	162	32	29-32 370-373
9	29	191	38	33-38 374-379
10	24	215	43	39-43 380-384
11	37	252	50	44-50 385-391
12	10	262	52	51-52 392-393
13	17	279	56	53-56 394-397
14	11	290	58	57-58 398-399
15	42	332	66	59-66 400-407

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 12; WILSON, N. C.

BLOCK 1-11	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Number Assigned (within E.D. 12)
1	7	7	1	1 408
2	17	24	5	2-5 409-412
3	20	44	9	6-9 413-416
4	34	78	16	10-16 417-423
5	13	91	18	17-18 424-425
6	16	107	21	19-21 426-428
7	13	120	24	22-24 429-431
8	14	134	27	25-27 432-434
9	13	147	29	28-29 435-436
10	14	161	32	30-32 437-439
11	14	175	35	33-35 440-442

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 13; WILSON, N. C.

BLOCK 1-23	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Number Assigned (within E.D. 13)
1	22	22	4	1-4 443-446
2	14	36	7	5-7 447-449
3	7	43	9	8-9 450-451
4	9	52	10	10 452
5	36	88	18	11-18 453-460
6	17	105	21	19-21 461-463
7	21	126	25	22-25 464-467
8	9	135	27	26-27 468-469
9	10	145	29	28-29 470-471
10	24	169	34	30-34 472-476
11	20	189	38	35-38 477-480
12	11	200	40	39-40 481-482
13	11	211	42	41-42 483-484
14	12	223	45	43-45 485-487
15	12	235	47	46-47 488-489
16	13	248	50	48-50 490-492
17	27	275	55	51-55 493-497
18	34	309	62	56-62 498-504
19	17	326	65	63-65 505-507
20	13	339	68	66-68 508-510
21	10	349	70	69-70 511-512
22	13	362	72	71-72 513-514
23	12	374	75	73-75 515-517

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 14; WILSON, N. C.

BLOCK 1-6	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Number Assigned (within E.D. 14)
1	41	41	8	1-8 518-525
2	65	106	21	9-21 526-538
3	37	143	29	22-29 539-546
4	44	187	37	30-37 547-554
5	35	222	44	38-44 555-561
6	31	253	51	45-51 562-568

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 15; WILSON, N. C.

BLOCK 1-21	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Number Assigned (within E.D. 15)
1	16	16	3	1-3 569-571
2	15	31	6	4-6 572-574
3	11	42	8	7-8 575-576
4	12	54	11	9-11 577-579
5	34	88	18	12-18 580-586
6	14	102	20	19-20 587-588
7	33	135	27	21-27 589-595
11	16	151	30	28-30 596-598
12	35	186	37	31-37 599-605
13	17	203	41	38-41 606-609
14	5	208	42	42 610
15	6	214	43	43 611
16	13	227	45	44-45 612-613
17	30	257	51	46-51 614-619
18	15	272	54	52-54 620-622
19	19	291	58	55-58 623-626
20	21	312	62	59-62 627-630
21	14	326	65	63-65 631-633

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 16; WILSON, N. C.

BLOCK 1-28	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Number Assigned (within E.D. 16)	
1	12	12	2	1-2	634-635
2	15	27	6	3-6	636-639
3	14	41	8	7-8	640-641
4	11	52	10	9-10	642-643
5	21	73	15	11-15	644-648
6	17	90	18	16-18	649-651
7	10	100	20	19-20	652-653
8	7	107	21	21	654
9	20	127	25	22-25	655-658
10	24	151	30	26-30	659-663
11	5	156	31	31	664
12	21	177	35	32-35	665-668
13	13	190	38	36-38	669-671
14	10	200	40	39-40	672-673
15	20	220	44	41-44	674-677
16	19	239	48	45-48	678-681
17	21	260	52	49-52	682-685
18	9	269	54	53-54	686-687
19	10	279	56	55-56	688-689
20	12	291	58	57-58	690-691
21	8	299	60	59-60	692-693
22	21	320	64	61-64	694-697
23	18	338	68	65-68	698-701
24	24	362	72	69-72	702-705
25	23	385	77	73-77	706-710
26	9	394	79	78-79	711-712
27	7	401	80	80	713
28	13	414	83	81-83	714-716

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 17N; WILSON, N. C.

BLOCK 1-37	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Number Assigned (within E.D. 17N)
1	6	6	1	1 717
2	8	14	3	1-3 718-720
3	7	21	4	4 721
4	4	25	5	5 722
5	26	51	10	6-30 723-727
6	14	65	13	11-13 728-730
7	5	70	14	14 731
8	13	83	17	15-17 732-734
9	18	101	20	18-20 735-737
10	13	114	23	21-23 738-740
11	6	120	24	24 741
12	15	135	27	25-27 742-744
13	5	140	28	28 745
14	15	155	31	29-31 746-748
15	10	165	33	32-33 749-750
16	13	178	36	34-36 751-753
17	10	188	38	37-38 754-755
18	10	198	40	39-40 756-757
19	5	203	41	41 758
20	17	220	44	42-44 759-761
21	11	231	46	45-46 762-763
22	9	240	48	47-48 764-765
23	7	247	49	49 766
24	20	267	53	5-53 777-780
25	9	276	55	54-55 781-782
26	14	290	58	56-58 783-785
27	7	297	59	59 786
28	6	303	61	60-61 787-788
29	9	312	62	62 789
30	9	321	64	63-64 790-791
31	10	331	66	65-66 792-793
32	16	347	69	67-69 794-796
33	7	354	71	70-71 797-798
34	15	369	74	72-74 799-801
35	9	378	76	75-76 802-803
36	9	387	77	77 804
37	25	412	82	78-82 805-809

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 18; WILSON, N. C.

BLOCK 1-27-	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	Su Serial Number Assigned (within E.D. 18)
1	10	10	1	1-2 810-811
2	9	19	4	3-4 812-813
3	19	38	8	5-8 814-817
4	13	51	10	9-10 818-819
5	11	62	12	11-12 820-821
6	22	84	17	13-17 822-826
7	14	98	20	18-20 827-829
8	18	116	23	21-23 830-832
9	30	146	29	24-29 833-838
10	11	157	31	30-31 839-840
11	12	169	34	32-34 841-843
12	11	180	36	35-36 844-845
13	29	209	42	37-42 846-851
14	15	224	45	43-45 852-854
15	13	237	47	46-47 855-856
16	13	250	50	48-50 857-859
17	8	258	52	51-52 860-861
18	14	272	54	53-54 862-863
19	15	287	57	55-57 864-866
20	8	295	59	58-59 867-868
21	14	309	62	60-62 869-871
22	18	327	65	63-65 872-874
23	26	353	71	66-71 875-880
24	12	365	73	72-73 881-882
25	4	369	74	74 883
26	5	374	75	75 884
27	11	385	77	76-77 885-886

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 19; WILSON, F. C.

BLOCK	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Number Assigned (within E.D. 19)
1	26	26	5	1-5 887-881
2	11	37	7	6-7 882-883
3	11	48	10	8-10 884-886
4	9	57	11	11 887
5	14	71	14	12-14 888-890
6	15	86	17	15-17 891-893
7	13	99	20	18-20 894-896
8	6	105	21	21 897
9	15	120	24	22-24 898-900
10	8	128	26	25-26 901-902
11	9	137	27	27 903
12	4	141	28	28 904
13	35	176	35	29-35 905-911
14	26	202	40	36-40 912-916
15	5	207	41	41 917
16	24	231	46	42-46 918-922
17	13	244	49	47-49 923-925
18	19	263	53	50-53 926-929

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 20; WILSON, N. C.

BLOCK	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Number Assigned (within E.D. 20)
1	31	31	6	1-6 930-935
2	13	44	9	7-9 936-938
3	19	63	13	10-13 939-942
4	10	73	15	14-15 943-944
5	18	91	18	16-18 945-947
6	20	111	22	19-22 948-951
7	14	125	25	23-25 952-954
8	18	143	29	26-29 955-958
9	20	163	33	30-33 959-962
10	6	169	34	34 963
11	23	192	38	35-38 964-967
12	17	209	42	39-42 968-971
13	37	246	49	43-49 972-978

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 21; WILSON, N. C.

BLOCK	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Number Assigned (within E.D. 21)	
1	12	12	2	1-2	979-980
2	41	53	11	3-11	981-989
3	22	75	15	12-15	990-993
4	12	87	17	16-17	994-995
5	22	109	22	18-22	996-1000
6	20	129	26	23-26	1001-1004
7	13	142	28	27-28	1005-1006
8	20	162	32	29-32	1007-1010
9	24	186	37	33-37	1011-1015
10	29	215	43	38-43	1016-1021
11	13	228	46	44-46	1022-1024
12	24	252	50	47-50	1025-1028
13	13	265	53	51-53	1029-1031
14	7	272	54	54	1032
15	16	288	58	55-58	1033-1036
16	16	304	61	59-61	1037-1039
17	33	337	67	62-67	1040-1045
18	22	359	72	68-72	1046-1050
19	13	372	74	73-74	1051-1052
20	46	418	84	75-84	1053-1062
21	8	426	85	85	1063
22	16	442	88	86-88	1064-1066
23	21	463	93	89-93	1067-1071
24	11	474	95	94-95	1072-1073
25	13	487	97	96-97	1074-1075
26	12	499	100	98-100	1076-1078
27	14	513	103	101-103	1079-1081
28	12	525	105	104-105	1082-1083
29	15	540	108	106-108	1084-1086

Table #5 ALLOCATION OF SU'S TO BLOCKS IN E.D. 22; WILSON, N. C.

BLOCK	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Number Assigned (within E.D. 22)
1	5	5	1	1087
2	7	12	2	1088
3	14	26	5	3-5 1089-1091
4	28	54	11	6-11 1092-1097
5	18	72	14	12-14 1098-1100
6	13	85	17	15-17 1101-1103
7	15	100	20	18-20 1104-1106
8	23	123	25	21-25 1107-1111
9	21	144	29	26-29 1112-1115
10	11	155	31	30-31 1116-1117
11	27	182	36	32-36 1118-1122
12	15	197	39	37-39 1123-1125
13	20	217	43	40-43 1126-1129
14	46	263	53	44-53 1130-1139
15	22	285	57	54-57 1140-1143
16	65	350	70	58-70 1144-1146
17	37	387	77	71-77 1147-1153
18	24	411	82	78-82 1154-1158
19	22	433	87	83-87 1159-1163

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 23; WILSON, N. C.

BLOCK 1-11	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Number Assigned (within E.D. 23)
1	9	9	2	1-2 1164-1165
2	6	15	3	3 1166
3	26	41	8	4-8 1167-1171
4	16	57	11	9-11 1172-1174
5	57	114	23	12-23 1175-1186
6	16	130	26	24-26 1187-1189
7	14	144	29	27-29 1190-1192
8	14	158	32	30-32 1193-1195
9	15	173	35	33-35 1196-1198
10	18	191	38	36-38 1199-1201
11	39	230	46	39-46 1202-1209

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 24; WILSON, N. C.

BLOCK 1-16	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Number Assigned (within E.D. 24)
1	5	5	1	1 1210
2	24	29	6	2-6 1211-1215
3	12	41	8	7-8 1216-1217
4	6	47	9	9 1218
5	13	60	12	10-12 1219-1221
6	66	126	25	13-25 1222-1234
7	30	156	31	26-31 1235-1240
8	10	166	33	32-33 1241-1242
9	5	171	34	34 1243
10	45	216	43	35-43 1244-1252
11	15	231	46	44-46 1253-1255
12	10	241	48	47-48 1256-1257
13	10	251	50	49-50 1258-1259
14	16	267	53	51-53 1260-1262
15	10	277	55	54-55 1263-1264
16	17	294	59	56-59 1265-1268

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 25N; WILSON, N. C.

BLOCK 1-67	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Number Assigned (within E.D. 25N)
1	33	33	7	1-7 1269-1275
2	19	52	10	8-10 1276-1278
3	15	67	13	11-13 1279-1281
4	62	129	26	14-26 1282-1294
5	4	133	27	27 1295
6	13	146	29	28-29 1296-1297
7	40	186	37	30-37 1298-1305
8	13	199	40	38-40 1306-1308
9	15	214	43	41-43 1309-1311
10	8	222	44	44 1312
11	11	233	47	45-47 1313-1315
12	13	246	49	48-49 1316-1317
13	11	257	51	50-51 1318-1319
14	5	262	52	52 1320
15	6	268	54	53-54 1321-1322
16	16	284	57	55-57 1323-1325
17	14	298	60	58-60 1326-1328
18	28	326	65	61-65 1329-1333
19	24	350	70	66-70 1334-1338
20	25	375	75	71-75 1339-1343
21	30	405	81	76-81 1344-1349
22	23	428	86	82-86 1350-1354
23	11	439	88	87-88 1355-1356
24	14	453	91	89-91 1357-1359
25	24	477	95	92-95 1360-1363
26	38	515	103	95-103 1364-1372
27	5	520	104	104 1373
28	8	528	106	105-106 1374-1375
29	9	537	107	107 1376
30	8	545	109	108-109 1377-1378
31	19	564	113	110-113 1379-1382
32	11	575	115	114-115 1383-1384
33	31	606	121	116-121 1385-1390
34	12	618	124	122-124 1391-1393
35	11	629	126	125-126 1394-1395
36	12	641	128	127-128 1396-1397
37	11	652	130	129-130 1398-1399
38	24	676	135	131-135 1400-1404
39	6	682	136	136 1405
40	27	709	142	137-142 1406-1411
41	28	737	147	143-147 1412-1416
42	20	757	151	148-151 1417-1420
43	22	779	156	152-156 1421-1425
44	11	790	158	157-158 1426-1427
45	7	797	159	159 1428
46	23	820	164	160-164 1429-1433
47	14	834	167	165-167 1434-1436

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 25N; WILSON, N. C.

BLOCK 1-67	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Number Assigned (within E.D. 25N)	
48	18	852	170	168-170	1437-1439
49	9	861	172	171-172	1440-1441
50	29	890	178	173-178	1442-1447
51	19	909	182	179-182	1448-1451
52	16	925	185	183-185	1452-1454
53	21	946	189	186-189	1455-1458
54	9	955	191	190-191	1459-1460
55	5	960	192	192	1461
56	8	968	194	193-194	1462-1463
57	18	986	197	195-197	1464-1466
58	10	996	199	198-199	1467-1468
59	42	1,038	208	200-208	1469-1477
60	10	1,048	210	209-210	1478-1479
61	18	1,066	213	211-213	1480-1482
62	6	1,072	214	214	1483
63	8	1,080	216	215-216	1484-1485
64	8	1,088	218	217-218	1486-1487
65	27	1,115	223	219-223	1488-1492
66	30	1,145	229	224-229	1493-1498
67	34	1,179	236	230-236	1499-1505

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 25P; WILSON, N. C.

BLOCK 1-16	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Number Assigned (within E.D. 25P)	
1	8	8	2	1-2	1506-1507
2	7	15	3	3	1508
3	10	25	5	4-5	1509-1510
4	14	39	8	6-8	1511-1513
5	14	53	11	9-11	1519-1516
6	11	64	13	12-13	1517-1518
7	11	75	15	14-15	1519-1520
8	6	81	16	16	1521
9	20	101	20	17-20	1522-1525
10	21	122	24	21-24	1526-1529
11	8	130	26	25-26	1530-1531
12	6	136	27	27	1532
13	65	201	40	28-40	1533-1535
14	6	207	41	41	1536
15	5	212	42	42	1537
16	4	216	43	43	1538

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 26; WILSON, N. C.

BLOCK 1-43	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Number Assigned (within E.D. 26)
1	21	21	4	1-4 1539-1542
2	18	39	8	5-8 1543-1546
3	12	51	10	9-10 1547-1548
4	16	67	13	11-13 1549-1551
5	16	83	17	14-17 1552-1555
6	16	99	20	18-20 1556-1558
7	7	106	21	21 1559
8	13	119	24	22-24 1560-1562
9	5	124	25	25 1563
10	8	132	26	26 1564
11	15	147	29	27-28 1565-1566
12	56	203	41	29-41 1567-1569
13	22	225	45	42-45 1570-1573
14	8	233	47	46-47 1574-1575
15	10	243	49	48-49 1576-1577
16	7	250	50	50 1578
17	16	266	53	51-53 1579-1581
18	10	276	55	54-55 1582-1583
19	5	281	56	56 1584
20	19	300	60	57-60 1585-1588
21	10	310	62	61-62 1589-1590
22	18	328	66	63-66 1591-1594
23	17	345	69	67-69 1595-1597
24	9	354	71	70-71 1598-1599
25	9	363	73	72-73 1600-1601
26	13	376	75	74-75 1602-1603
27	10	386	77	76-77 1604-1605
28	6	392	78	78 1606
29	5	397	79	79 1607
30	10	407	81	80-81 1608-1609
31	17	424	85	82-85 1610-1613
32	8	432	86	86 1614
33	9	441	88	87-88 1615-1616
34	27	468	94	89-94 1617-1622
35	8	476	95	95 1623
36	13	489	98	96-98 1624-1626
37	15	504	101	99-101 1627-1629
38	11	515	103	102-103 1630-1631
39	14	529	106	104-106 1632-1634
40	20	549	110	107-110 1635-1638
41	21	570	114	111-114 1639-1692
42	13	583	117	115-117 1643-1645
43	12	595	119	118-119 1646-1647

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 28S; WILSON, N. C.

BLOCK 1-4	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Number Assigned (within E.D. 28S)
1	9	9	2	1-2 1648-1649
2	6	15	3	3 1650
3	5	20	4	4 1651
4	5	25	5	5 1652

Table #V ALLOCATION OF SU'S TO BLOCKS IN E.D. 29S; WILSON, N. C.

BLOCK 1-17	Number of ODU'S	Cumulative ODU'S	Cumulative SU'S	SU Serial Number Assigned (within E.D. 29S)
1	7	7	1	1 1653
2	9	16	3	2-3 1654-1655
3	6	22	4	4 1656
4	21	43	9	5-9 1657-1661
5	3	46	9	9 1662
6	7	53	11	10-11 1663-1664
7	6	59	12	12 1665
8	5	64	13	13 1666
9	9	73	15	14-15 1667-1668
10	6	79	16	16 1669
11	9	88	18	17-18 1670-1671
12	4	92	18	18 1672
13	4	96	19	19 1673
14	14	110	22	20-22 1674-1676
15	9	119	24	23-24 1677-1678
16	7	126	25	25 1679
17	9	135	27	26-27 1680-1681

TABLE #VI. ALLOCATION OF SAMPLING UNITS TO DIVISIONS IN THE OPEN COUNTRY, WILSON COUNTY (SAMPLE 2)

Division		INOD		CONJUGATIVE INOD		CONJUGATIVE SU's		SU	
Block	Div.	Sect.	Block	Div.	Sect.	Block	Div.	Sect.	Serial Numbers
1	A	839	225	839	225	168	45		
									1 - 3
									4 - 19
									20 - 27
									28 - 36
									37 - 42
									43 - 45
1	B	291	516	516	103				46 - 47
									48 - 56
									57 - 69
									70 - 74
									75 - 91
									92 - 97
									98 - 103
1	C	153	669	669	134				104
									105 - 116
									117 - 122
									123 - 126
									127 - 130
									131 - 134
1	D	139	808	808	162				135
									136 - 142
									143 - 153
									154 - 162
1	E	31	839	839	168				163 - 168

Division		INOD		CUMULATIVE INOD		CUMULATIVE SU'S		SU		
Section	Block	Div.	Sect.	Block	Div.	Sect.	Block	Serial Numbers		
2	A	794	221	23	1633	1060	327	169-172		
								862	172	173-181
								903	181	182-183
								917	183	184-186
								929	186	187-189
								944	189	190-191
								955	191	192-197
								987	197	198-202
								1009	202	203-212
212	212									
2	B	196	30	1256	1090	251	218	213-218		
								1127	225	etc.
								1179	236	
								1256	251	
2	C	139	27	1395	1283	279	257			
								64	269	
								3	270	
								45	279	
2	D	91	91	1486	1486	297	297			
2	E	147	147	1633	1633	327	327			
								147	1633	327

Division	Section	INOD		CUMULATIVE INOD		CUMULATIVE SU'S	
		Div.	Sect.	Block	Div.	Sect.	Block
4	A	444	130		2611	2297	522
	1			14		2181	436
	2			14		2195	439
	3			8		2203	441
	4			55		2258	452
	5			9		2267	453
	6			10		2277	455
	7			6		2283	457
	8			14		2297	459
4	B		83			2380	476
	1			52		2349	470
	2			19		2368	473
	3			12		2380	476
4	C		61			2441	488
	1			47		2427	485
	2			14		2441	488
4	D		72			2513	503
	1			72		2513	503
4	E		98			2611	522
	1			98		2611	522

Division	INOD		CUMULATIVE INOD		CUMULATIVE SU'S	
	Block	Div. Sect.	Block	Div. Sect.	Block	Div. Sect.
5	A	615	192	3226	2803	645
						561
	1		36		2647	529
	2		36		2683	537
	3		55		2738	548
	4		15		2753	551
	5		25		2778	556
	6		10		2788	558
	7		15		2803	561
5	B	180			2983	597
	1		33		2836	567
	2		22		2858	572
	3		27		2885	577
	4		15		2900	580
	5		14		2914	583
	6		49		2963	593
	7		20		2983	597
5	C	72			3055	611
	1		64		3047	609
	2		8		3055	611
5	D	104			3159	632
	1		67		3122	625
	2		22		3144	629
	3		15		3159	632
5	E	67			3226	645
	1		67		3226	645

Division	INOD		CUMULATIVE INOD		CUMULATIVE SU'S	
	Block	Div. Sect.	Block	Div. Sect.	Block	Div. Sect.
6 A	1078	274	4570	3500	914	700
6 B		470	3970	794		
6 C		334	4304	861		

Division	INOD		CUMULATIVE INOD		CUMULATIVE SU'S	
	Block	Div. Sect.	Block	Div. Sect.	Block	Div. Sect.
6	D	762				
		186				
	1		27	4490	898	866
	2		29			872
	3		90			890
	4		40			898
6	E					
	1	80	80	4570	914	914
7	A	166				
	1		12	5473	1095	
	2		8	4736	947	
	3		45			916
	4		15			918
	5		21			927
	6		13			930
	7		52			934
						937
						947
7	B	111				
	1		20	4847	969	951
	2		57			963
	3		34			969
7	C	219				
	1		25	5066	1013	974
	2		25			979
	3		80			995
	4		41			1004
	5		26			1009
	6		10			1011
	7		12			1013

Division	Section	INOD		CUMULATIVE INOD		CUMULATIVE SU'S	
		Div.	Sect.	Block	Div.	Sect.	Block
7	D	796	183			1050	1026 1037 1044 1050
	1			64			
	2			57			
	3			34			
	4			28			
7	E		224		5473	1095	1095
	1			224			
8	A		69		5542	1172	1108
	1						
	2			22			1099 1108
				47			
8	B		129		5671	1134	1113 1119 1125 1130 1134
	1			21			
	2			31			
	3			30			
	4			25			
	5			22			
8	C		65		5736	1147	1141 1147
	1			35			
	2			30			
8	D		34		5770	1154	1149 1154
	1			10			
	2			24			
8	E		92		5862	1172	1172
	1			92			

TABLE VII. INTERVIEWERS & AREAS (SAMPLE #2)

Area Code	Interviewer's Name	Primary Sampling Units		Reserve Sampling Units	
A.	Mr. Bob Morris	63	75	47	78
B.	Mrs. Sally Tomlinson	164	604	222	264
C.	Mr. Robert Young	131	924	883	916
D.	Mrs. J. B. Harris	10	342	22	400
E.	Miss Barbara Baldwin	499	559	548	368
F.	Mrs. Clara J. Harris	513	517	459	466
G.	Miss Lettie Ricks	495	1003	374	566
H.	Mrs. Blanche F. Taylor	971	1189	963	1020
I.	Mr. Calvin Hester	1030	1132	1028	1037
J.	Mr. John Harriss	1258	1569	1596	1614
K.	Mrs. Betty McArthur	830	927	1222	1437
L.	Mr. Phil Minford	825	872	756	1301
M.	Mrs. Dolly Strickland	1288	1603	754	1562
N.	Mr. Robert Evance	709	862	588	610
O.	Mrs. Annie B. Johnson	174	653	852	854
P.	Mr. Robert Lindsey	655	1487	751	859
Q.	Mrs. Ben C. Barbee	1665	1695	1501	1678
<u>Map Supplements</u>					
I.	Mr. Charles Oglesby	720	801	737	827
II.	Mrs. E. Hinnant	925	1022	824	959
III.	Mrs. Virginia Williams	974	1130	986	1000
IV.	Mr. Samuel Hodges	41	1126	29	150
V.	Mrs. Hazel Crisp	3	53	64	Elm City
VI.	Mrs. Helen Webb	11	217	231	Sharpsburg
VII.	Mrs. Helen Webb	233	249	78	SU 3 & SU 15
VIII.	Mrs. Helen Webb	153	541	620	SU 78
IX.	Mrs. Hazel Crisp	603	879	617	SU 153
X.	Mrs. Helen Webb	532	583	125	Black Creek
XI.	Mr. J. W. McArthur	432	501	681	SU 125
XII.	Mrs. Crisp 3rd Map	387	423	639	SU 432 & SU 639
XIII.	Mrs. Crisp 2nd Map	109	146	271	SU 423 & SU 515
XIV.	Mrs. Webb's 2nd Map	102	401	1074	SU 1095 & SU 1074
				85	276 Stanton's-
					burg
					SU 85 & SU 102

APPENDIX IV

MANUAL FOR THE INTERVIEWER

CENTER FOR OCCUPATIONAL EDUCATION

NORTH CAROLINA STATE UNIVERSITY
RALEIGH, NORTH CAROLINA

Training Session

Wilson County Community Analysis Study

Project II

Center for Occupational Education
North Carolina State University
Raleigh, North Carolina

March 16, 1967

Lynn Ondrizek - Field Coordinator

Introduction (Background and General Purposes
of the Study)

Dr. Dorothy S. Williams

The Research Instruments: Their Purposes and
Utility

Household Schedule

Miss Sylvia McCracken
Richard Teague

Cognitive Openness Scale

Lynn Ondrizek

The Art of Successful Interviewing

Mrs. Marietta Fromm

The Sampling Design

Lynn Ondrizek

General Procedures

Mike Wise

Discussion Period

Dr. Dorothy S. Williams

A Personal Note to the Interviewer

We are indeed pleased to have you serve as an interviewer for the Wilson County Community Analysis Study. We realize the important function which we are requesting you to perform. Therefore, we are soliciting your cooperation and support for this worthwhile research investigation.

To a great extent, the success of the project and its value to the Wilson community depend upon your ability to secure accurate and complete responses from whom you will be interviewing.

This manual of information and instructions is to serve as a guide to you. In it you will note that we have attempted to offer answers to some of the questions which we felt might confront you. We feel assured that there are some others. Therefore, we are requesting that you feel free to ask any questions which you deem necessary to the adequate and efficient performance of your assignment.

Again, permit us to express our appreciation to you for your keen interest in, and cooperation with our efforts to learn more about Wilson County; its inhabitants and their Occupational - Education Needs.

WELCOME TO THE TEAM!

The Procedure for Interviewing

The interviewer's art consists of creating a situation in which the respondent's answers will be reliable and valid. The respondent should feel encouraged to voice his frank opinions without fearing that his attitudes will be revealed to others. The interviewer should express no surprise and should not reveal his opinions of the respondent's answers.

The following six steps should be understood and followed by the interviewer.

1. Creating a Friendly Atmosphere.

a. The interviewer's introduction should be brief, casual, and positive.

The introduction should assure the respondent that a reliable organization is conducting the interview, that the interview is important, and it should include a general statement of the purpose of the interview. The study's interest lies in actual questions, and the interviewer should get into them as quickly as possible.

b. The interviewer's aim is to interview everyone eligible for the sample. A small proportion of respondents will be suspicious or hostile, and a large number may require a little encouragement or persuasion; but the good interviewer will find that hardly one person in twenty actually turns him down. Many people are flattered to be singled out for an interview. The interviewer should answer any legitimate questions the respondent has and should, if necessary,

produce his credentials and explain that names are not recorded, that the interview is not a test (there are no "right" or "wrong" answers).

c. The interviewer's manner should be friendly, courteous, conversational and unbiased. He should be neither too grim, not too effusive; neither too talkative nor too timid. The idea should be to put the respondent at ease, so that he will talk freely and fully.

d. Above all, an informal, conversational interview is dependent upon a thorough mastery by the interviewer of the actual questions in the schedule. He should be familiar enough with them to ask them easily, and he should know what questions are coming next, so there will be no awkward pauses while he studies the questionnaire.

e. The interviewer's job is fundamentally that of a reporter, not an evangelist, a curiosity-seeker, or a debator. He should take all opinions in stride and never show surprise or disapproval of a respondent's answer. He should assume an interested manner toward his respondent's opinions and never divulge his own. If he should be asked for his views, he should laugh off the request with a remark that his job at the moment is to get opinions, not to have them.

f. The interviewer must keep the direction of the interview in his own hands, discouraging irrelevant conversation and endeavoring to keep the respondent on the point. Fortunately, he will usually find that the rambling, talkative respondents are the very ones who least resent a firm insistence on attention to actual business of the interview.

2. Reading statements to respondents

- a. Read each statement as it is worded.
- b. If any respondent gives evidence of not understanding a particular statement, the interviewer can only repeat it slowly and with proper emphasis, offering only such explanations as may be specifically authorized in his instructions and, if the respondent still does not understand, note this fact opposite the statement.
- c. The statements must be read in the same order as they appear on the copy.
- d. Every statement must be read and recorded according to the instructions.

3. Obtaining a response

- a. Obtain a specific, complete response. The respondent may talk a great deal around the subject without actually answering the question. Some of this conversation on her part may be in the nature of recall and useful in helping her to arrive at her answer. Do not stop her abruptly, but do gently and persistently ask the question again until you get an answer to that question.
- b. The interviewer must be extremely careful not to suggest a possible reply. Do not lead the respondent into an answer. For example, if a respondent hesitates to make a choice between the two possible answers, the interviewer can only offer to repeat the question, or state "In general, what would you say?" He must never suggest one of the answers.

c. An "I don't know" or "I can't remember" response may require a little more probing on your part. The respondent may have ideas on a subject but may never have put them into words before, or she may not remember because an event occurred a long time ago, or because she would rather not remember.

d. If a qualified answer is given to a "Yes - No" or "Agree - Disagree" question, the interviewer may find it helpful to say such things as, "In general, what would you say?" or "The way things look to you now, what would you say?" If the respondent still gives a qualified answer, the interviewer should make a note of the qualification beside the question.

4. Reporting the Response

a. Record the answers clearly. Illegible handwriting or sloppy recording of numbers and checkmarks may make the whole questionnaire useless. The interviewer must remember that the coding and analysis of the questionnaire will be done by people who are not familiar with his writing. Record the responses where they belong, and try to use only common abbreviations. The interviewer should put himself in the place of the person who must analyze the questionnaire and determine whether his recordings of the answers are clear, readable, and unambiguous.

b. Make a habit of inspecting each interview immediately after it's completion. If the interviewer lacks any information, he can go back and ask the respondent for it. If the questionnaire contains errors or omissions, he can correct them on the spot. You may not have been able to record some of the answers completely during the interview. If you edit your

interview immediately you will be able to remember and record more of what the respondent actually said. The more completely you record her answers, the more useful they will be for the purposes of the study.

5. Sampling

The interviewer has the essential responsibility of interviewing the individual who has been selected in the sample. He must make sure that he contacts the right person. If he is unable to do so, he should report back to the supervisor of the survey for instructions. Failure to interview the individuals selected in the sample may make the whole survey invalid. Under no circumstances should the interviewer take it upon himself to "randomly" select a respondent to replace one whom he is unable to interview.

6. Bias

The interviewer's opinion of the respondent, and the respondent's opinion of the interview, influence the interview situation and the results obtained. To help keep bias at a minimum, there are several cautions to observe.

a. The interviewer's appearance must be neutral. This means that the interviewer might be classed in any number of groups: rich or poor, well or poorly educated, from a city or farm, Democrat or Republican, religious or not, and so forth. This impression of "namelessness" should be maintained throughout the interview. Although the method of doing this will vary depending upon the locality in which the interviews are being done, some general suggestions can be followed:

- (1) Dress neatly and simply.

(2) Personal appearance should be "average" - that is neither too dressy or too casual.

(3) Speech should be carefully controlled, including choice of language - (plain English is best).

(4) In the course of conversation, the interviewer should refrain from expressing his opinions, even if they are in agreement with the respondent's.

b. When possible, conduct the interview privately so that the respondent will not worry about how his opinions affect some third person. Sometimes it may be necessary to interview a housewife while her children are at home. Avoid, however, interviewing a respondent while friends, or the respondent's spouse are in the room. If this situation occurs, stress the importance of the interview to the respondent, and the necessity of getting only his opinions and attitudes towards the questions. Suggest that you and he conduct the interview in another room, i.e. the kitchen or dining room.

c. Adopt an informal, conversational manner.

d. Do not form any opinions of the respondent on the basis of past experience or information. For example, don't assume that if the respondent has an 8th grade education he will be unable to answer certain questions.

Using the Psychological Scale

Why use a psychological scale?

In order to help people to help themselves it makes good sense to first discover how the world looks from the other person's viewpoint. To guess at what another person thinks, feels, or believes about the world which surrounds him is a poor way to get to the truth of matters. What is needed is a method by which the person himself can list his feeling and beliefs. We need to see his world as he sees it, not as we think he sees it.

The psychological scale used in this study is a method by which we may enter the world of Wilson County residents. Without your help as an interviewer and the cooperation of the people you contact no good can ever come out of this project. With your help in getting people to respond to this scale, we should be able to discover what the county residents think and believe about life in general.

Does this scale have to be this long?

Yes. We are interested in obtaining a complete picture of county life. To do this means that we have to ask about many phases of life in order to cover those things with which each person contacted is familiar. Some statements will be meaningless to one person but very realistic to another person. We must cover all possibilities in one scale, that is why this scale has this many statements.

Why aren't these questions directly related to Wilson County?

We have a problem here. We say we are interested in Wilson County,

yet none of the questions deals directly with the county or things in it. Many people will ask you why.

One reason is that everyone we contact will not be a native of Wilson County; some people who have just moved into Wilson County will know very little about county life. Everyone, however, has beliefs about life in general, and these beliefs usually determine how a person thinks about a particular part of life. Knowing a person's general beliefs tells us more about that person than knowing that he believes exactly one thing about a specific topic. For example, knowing that a man practices the Golden Rule tells us much more about him than just knowing that he is kind to his wife.

The questions in this psychological scale aim at getting information about a person's general beliefs. We hope that this approach will give us a much broader picture of what a person believes, and that this information will allow us to infer what a person would believe about particular things in Wilson County.

Does this scale reveal anything a person does not want us to know?

No. This scale is strictly an opinion questionnaire. It does not measure intelligence, abilities, personality, or anything except the opinion the respondent chooses to give us. There is no "right" or "wrong" answer to any statement, so the only thing we will know is exactly what the person marks as his opinion.

Who sees these scales after they are collected?

Besides yourself, no one will see any completed scale except the researchers on our staff. No one else in any capacity will have the opportunity or the permission to view any of the scales.

How do we administer the scale?

First, and most important, you as an interviewer should know and understand the directions that are printed on the front of each scale. We will go through these now to make certain that everyone understands them.

If a person agrees to complete the scale and can read it himself, your job is fairly easy. The following steps should be used:

- (1) Let the person read the directions himself.
- (2) Answer any questions about the directions until the person truly understands them.
- (3) Let the person begin responding to the statements.
- (4) Check to see that the person is following directions.
- (5) Encourage the person to complete the scale. A half-done scale is useless to us.
- (6) Remember - these people are doing us a great service. Treat them with respect and sincerely thank them before you leave.

If a person agrees to complete the scale, but cannot read it for himself, follow these steps:

- (1) Read the directions to him slowly and carefully. Practice this before you contact anyone in the field.
- (2) Answer any questions about the directions until the person truly understands them.
- (3) Read each statement to the person slowly and carefully. Repeat any statement with two or three readings of any single statement, if necessary. If a person still doesn't understand the statement, ask them to guess at its meaning and to respond as best he can.
- (4) After reading each statement to the person, ask first whether they agree or disagree with it, mark their response accordingly; then ask how strongly they agree or disagree with it and mark their response.

(5) Go through each statement in the scale in this manner. Encourage the person to complete the entire scale.

(6) Thank the person sincerely for his time and effort before you depart.

APPENDIX V

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PROJECT II

WILSON COUNTY STUDY

Interviewer _____

First, read the statement. If you agree with it, put a circle around A. AGREE, or if you disagree with it, put a circle around B. DISAGREE.

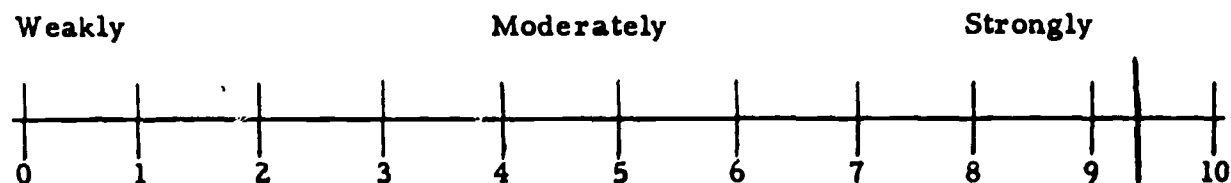
The line, numbered 0 - 10, with the labels "Weakly", "Moderately," and "Strongly" lets you mark how much you agree or how much you disagree. Draw a straight mark through the point on this line which best shows how strongly you agree or disagree with the statement. The numbers under the line are simply guides to let you make exact decisions. The larger the number, the more strongly you agree or disagree with the statement.

As an example, let us suppose that you disagree very much with the sample statement. First you would circle B. DISAGREE, then put a straight mark through the line to show how strongly you disagree. If you disagreed very strongly, then your answer would look something like this:

1. The laws of this country are fair to everyone.

A. AGREE

☒ B. DISAGREE



If you disagree, but less strongly than this, your mark would be more to the left than in this sample. The location of your mark always depends on how strongly you agree or disagree with any statement.

There is no time limit, but usually your first impression of a statement is best for expressing your true feeling. Work quickly, but do not rush. Do you have any questions?

We hope you will be able to give an answer to each statement, but if you find a statement that you prefer not to answer, skip it and go on to the next one. All your answers will be held confidential.

1. When a group's members begin to express differences of opinion among themselves, the group cannot last long.

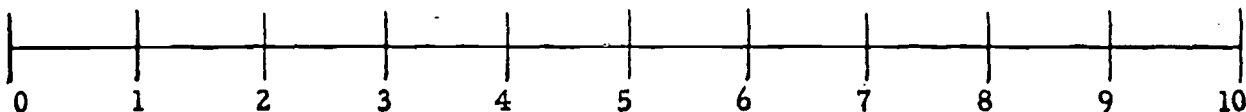
A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



2. There is really nothing new in this world, just different combinations of old things.

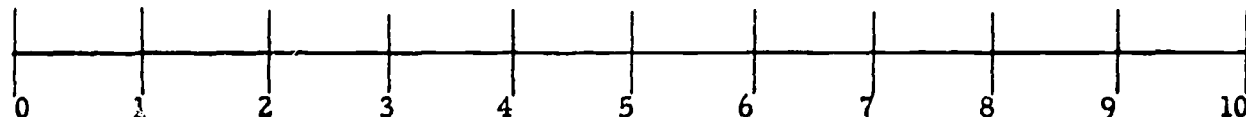
A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



3. There are certain things that man will never be able to explain and it is useless to probe into these areas.

A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



4. Most of the ideas printed in recent books aren't worth the time it takes to read them.

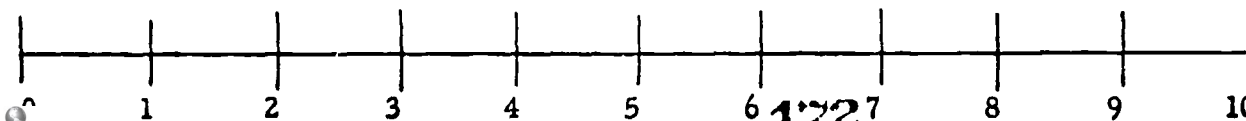
A. AGREE

B. DISAGREE

Weakly

Moderately

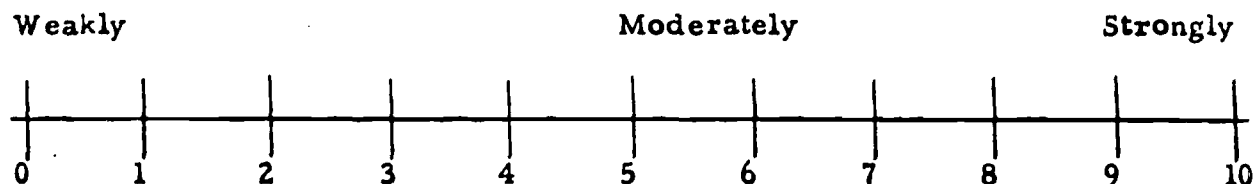
Strongly



5. The present is but a place of exile for the soul, the future is the place of it's life.

A. AGREE

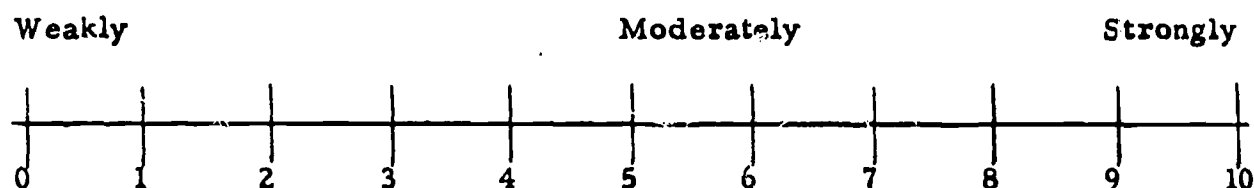
B. DISAGREE



6. When one knows, there is no need to reason..

A. AGREE

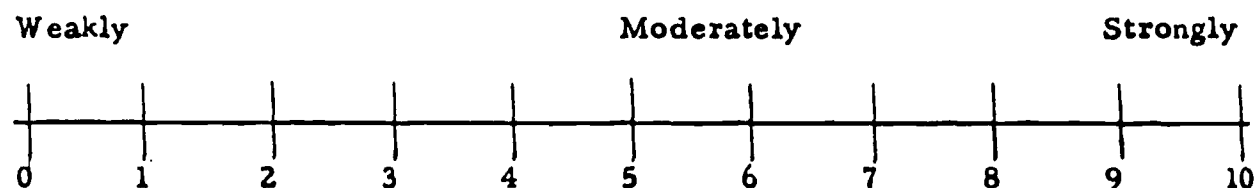
B. DISAGREE



7. I think that more churches than just the Catholic Church should refuse funeral services for a suicide.

A. AGREE

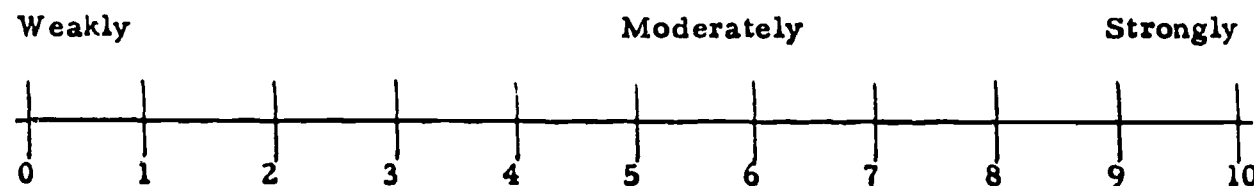
B. DISAGREE



8. I get embarrassed when someone asks me to do something I cannot do.

A. AGREE

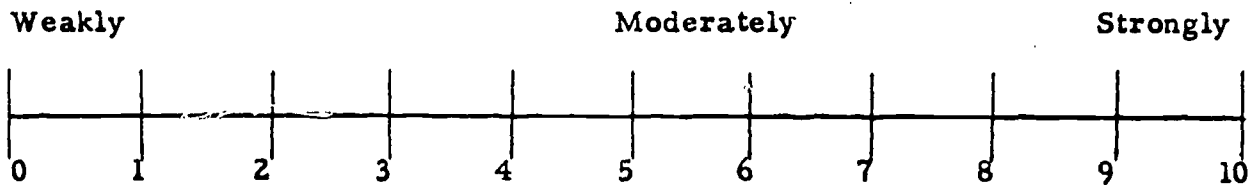
B. DISAGREE



9. Most children would be better off if the government were responsible for their upbringing and education.

A. AGREE

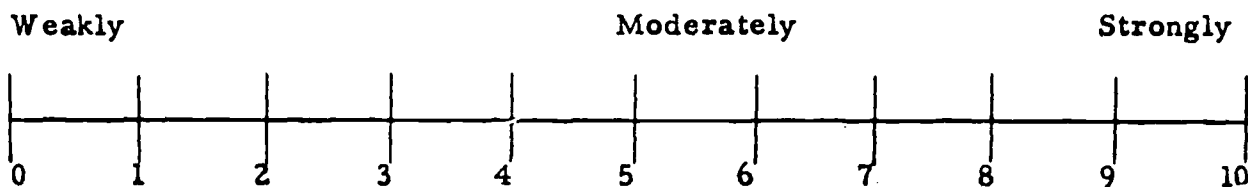
B. DISAGREE



10. Fear is a sign of moral weakness.

A. AGREE

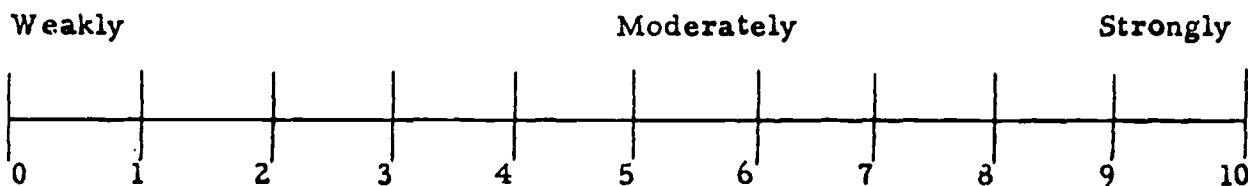
B. DISAGREE



11. The real origin of American wars lies in Wall Street, New York City.

A. AGREE

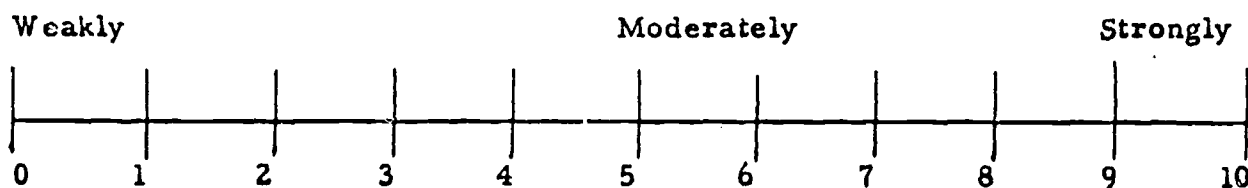
B. DISAGREE



12. People who are very poor and those who are very rich cause most of the kinds of trouble which our society suffers.

A. AGREE

B. DISAGREE



13. A person's character is revealed in his facial features.

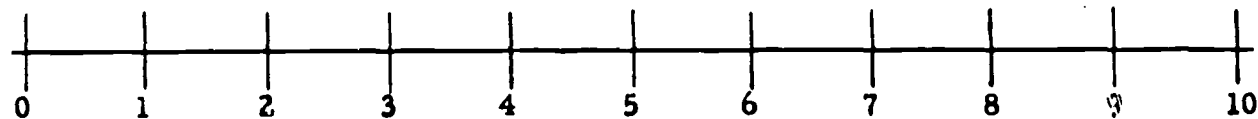
A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



14. Destiny must have great things in store for me because I'm nothing special right now.

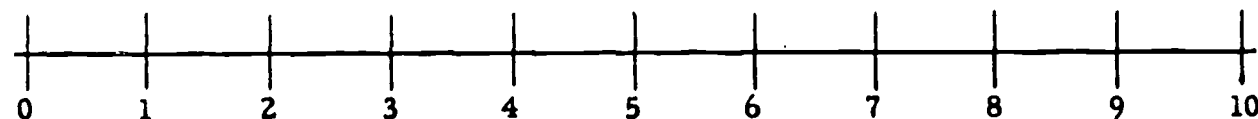
A. AGREE

B. DISAGREE

Weakly.

Moderately

Strongly



15. It's too bad that our society doesn't permit bragging, because if it did, people wouldn't get the wrong impressions of me.

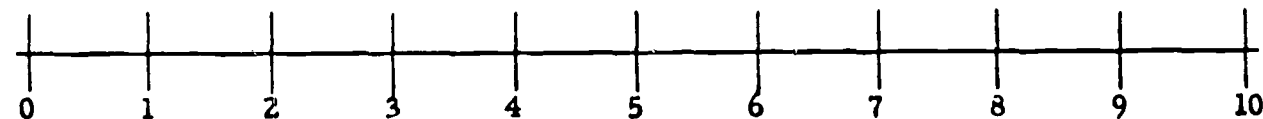
A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



16. I would sooner do something for the good of the United States than for the good of mankind in general.

A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



17. i behave myself because i fear getting caught doing something wrong.

A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



18. Only the very selfish consider life worth living no matter what the price.

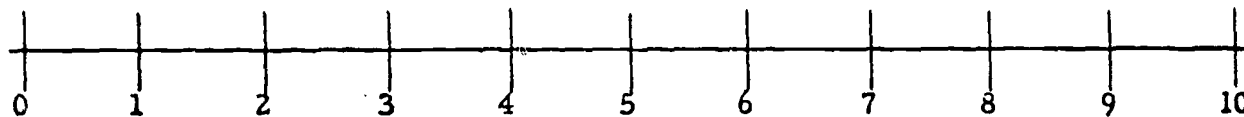
A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



19. The only worthwhile discussions are those which uncover flaws in a person's thinking.

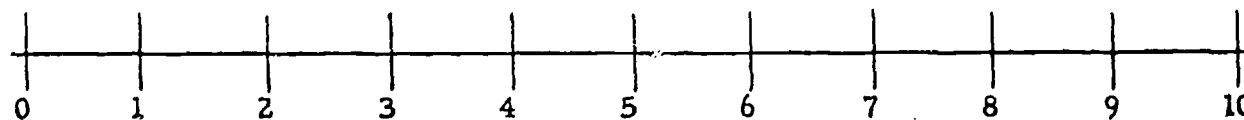
A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



20. A person should seek and deserve the hatred of his sworn enemies.

A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



21. Human nature will someday be perfected to everyone's satisfaction.

A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



22. Members of the opposite sex often pretend to like me so that they can take advantage of me.

A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



23. Every great movement on this globe owes its rise to the great speakers and not to the great writers.

A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



24. I do not know how the world came to be as it is, but what I believe is something that I cannot support through reason.

A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



25. Most economic troubles would disappear if private ownership of goods and wealth was changed to public ownership and distribution.

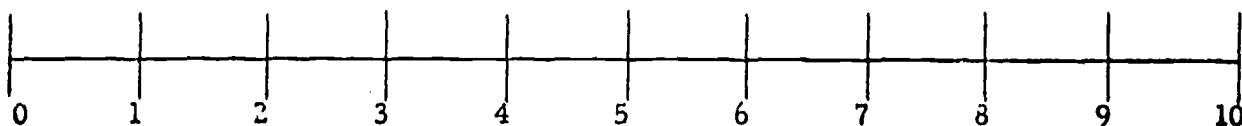
A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



26. It is always difficult to settle a disagreement because the person who is wrong won't admit it.

A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



27. People of high ideals are usually less popular than those whose ideals are not so lofty.

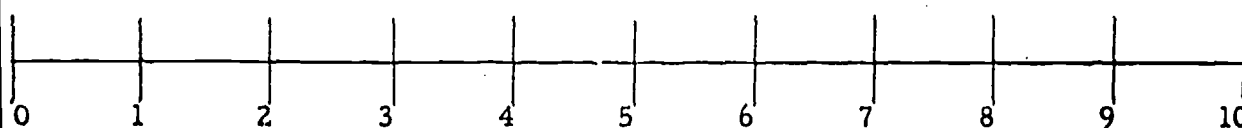
A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



28. All present events can be understood in terms of past events.

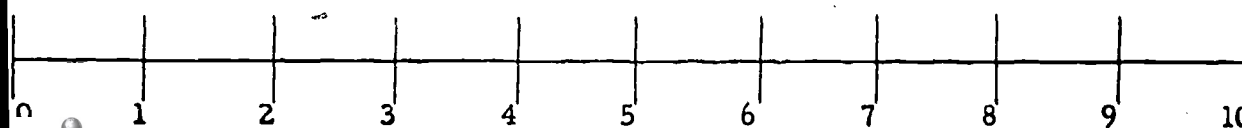
A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



29. As long as a man isn't abnormal, there's no good reason for studying his mind.

A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



30. Higher education should be available to those who want it, but intellectuals are often the source of very dangerous ideas.

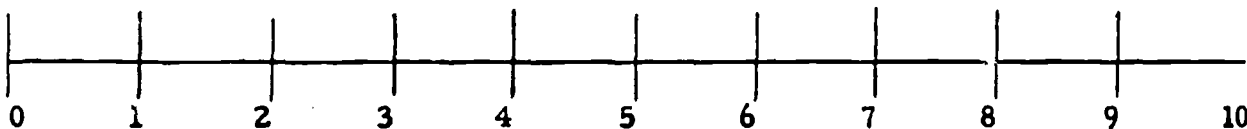
A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



31. If a person truly hates me, it's more likely that I'm in the right instead of the wrong.

A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



32. It's not what you know that counts, but whom you know.

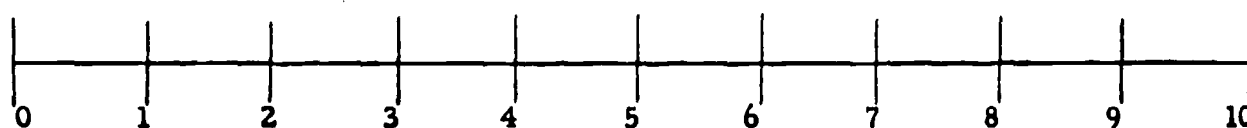
A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



33. We can always find the causes of present troubles in past injustices.

A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



34. Only our ancestors really knew what peace of mind was.

A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



35. A person with unlimited opportunities often cannot find satisfaction in any achievement.

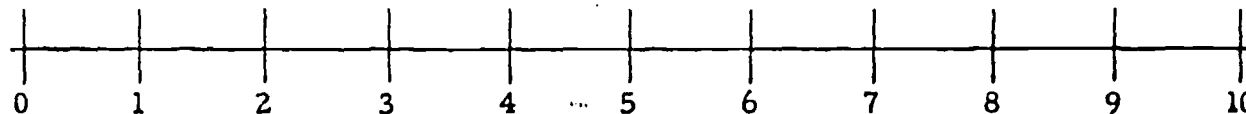
A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



36. The dreamer is concerned with national conditions, the doer is concerned with community conditions.

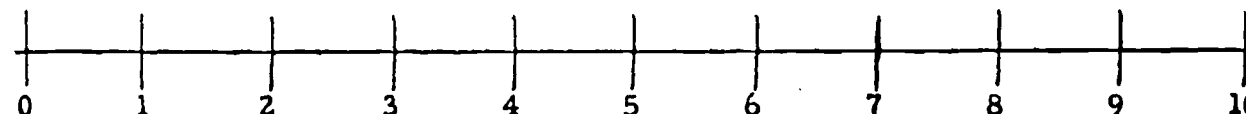
A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



37. Opportunity knocks but once.

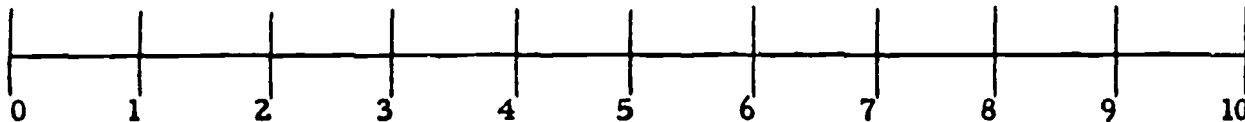
A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



38. The United Nations is always in trouble because its member nations actually have little in common.

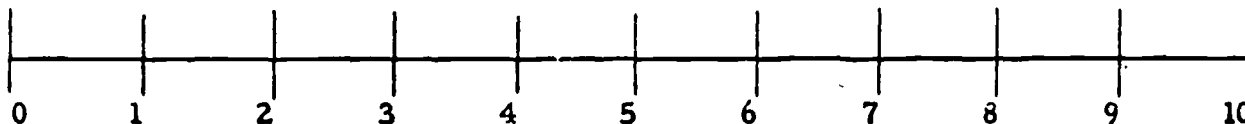
A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



39. Scientists who turn to religion more often than not do so only for selfish reasons.

A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



40. There's no use putting yourself out for people because most will just stab you in the back.

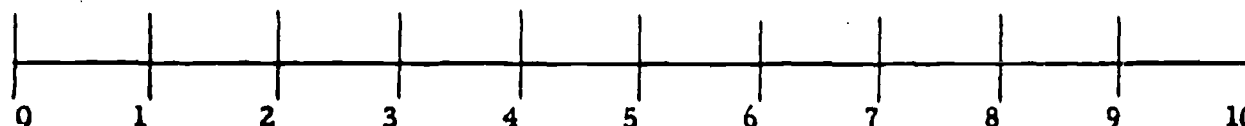
A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



41. Ex-criminals really don't deserve all of the privileges they enjoyed before they broke the law.

A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



42. If people had the power to choose when and where they would be born, the world would probably be a much better place.

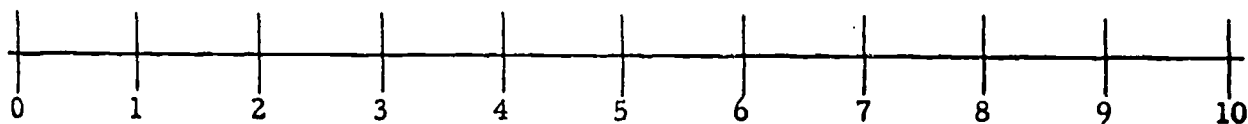
A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



43. Economists should be prevented from tampering with the natural laws which determine prices and profits.

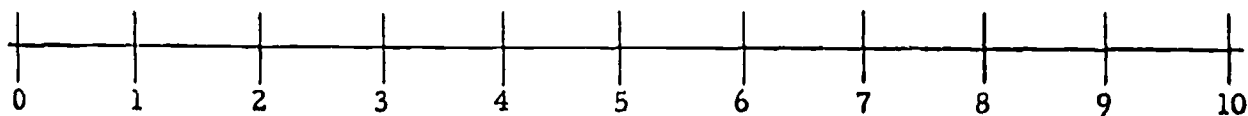
A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



44. Good friends may disagree over minor matters, but only bitter enemies disagree about basic beliefs.

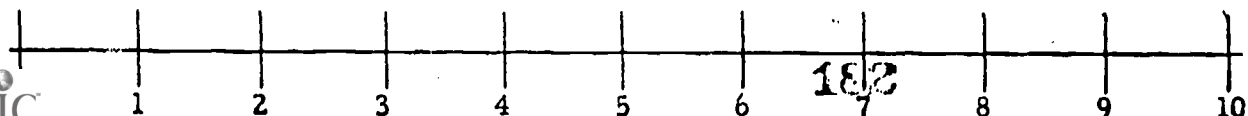
A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



45. I know that people talk about me behind my back.

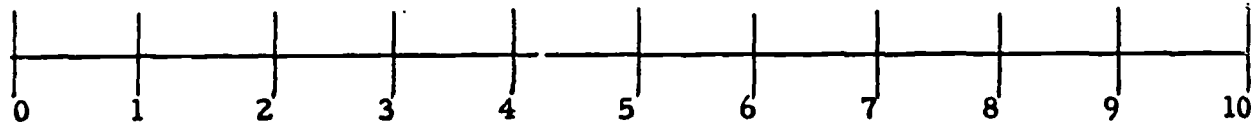
A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



46. Contact with foreigners should be limited because they often have dangerous ideas.

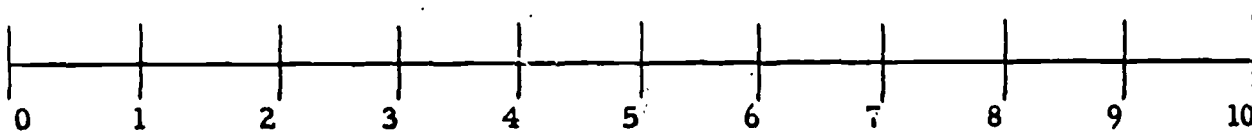
A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



47. Whenever I hear other people arguing I can tell rather quickly who is right and who is wrong.

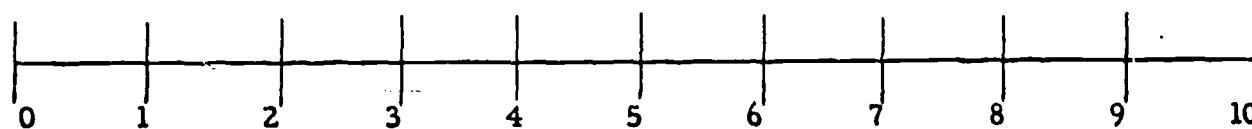
A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



48. The present is a faded and distorted reflection of the vast unknown which surrounds us.

A. AGREE

B. DISAGREE

Weakly

Moderately

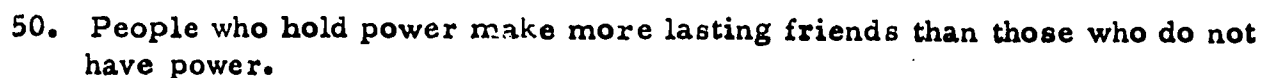
Strongly



63

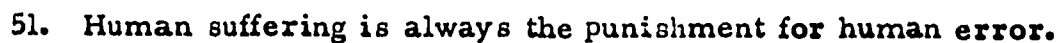
B. DISAGREE

Strongly



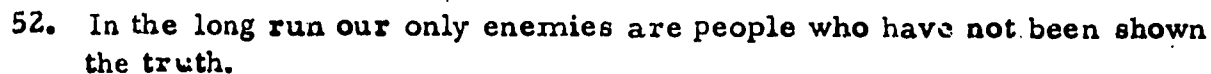
B. DISAGREE

Strongly



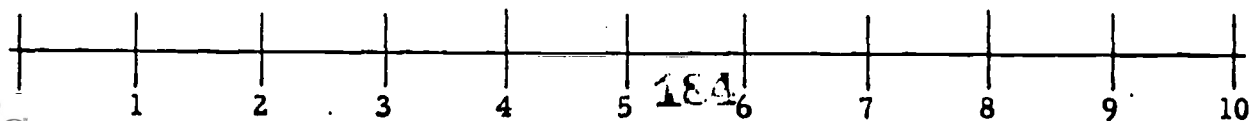
B. DISAGREE

Strongly



B. DISAGREE

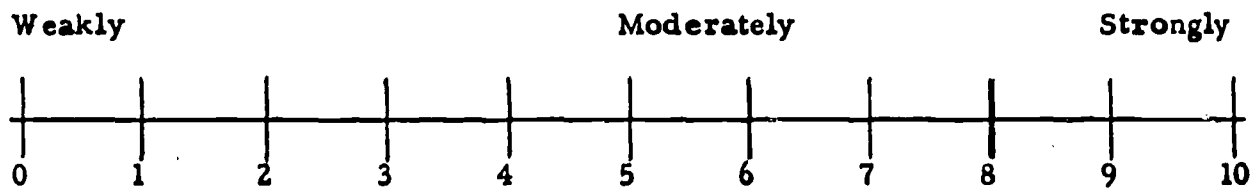
Strongly



53. I've noticed that people who do not believe as I do never admit that they are wrong even when the evidence is plain.

A. AGREE

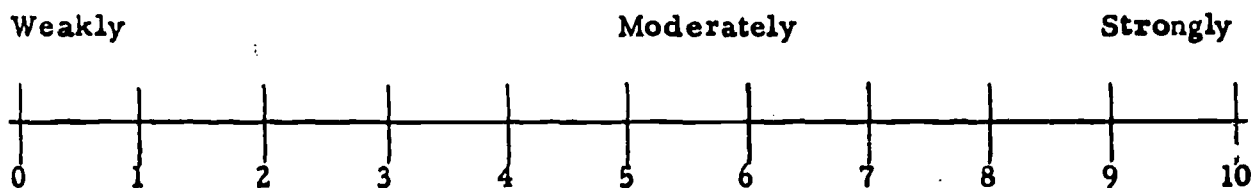
B. DISAGREE



54. I've worked hard to create a good image of myself in my community.

A. AGREE

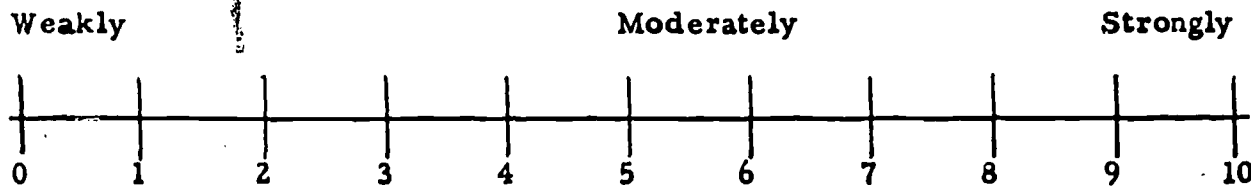
B. DISAGREE



55. The best evidence of the correctness of one's beliefs is the measure of hatred that he receives from his enemies.

A. AGREE

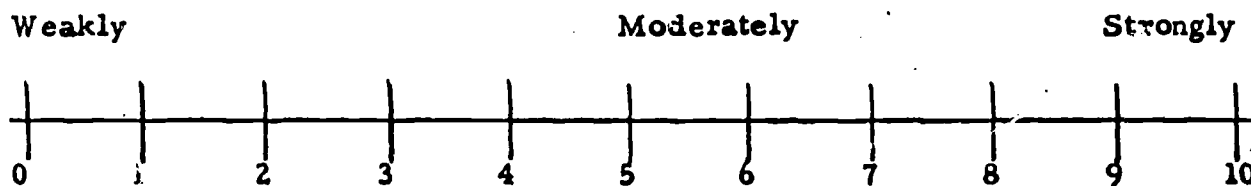
B. DISAGREE



56. Since death always awaits us, it is only natural to fear the future.

A. AGREE

B. DISAGREE



57. Greatness is more important than happiness.

A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



58. Knowing that a certain man is an artist pretty much tells us what kind of life he leads.

A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



59. A person must choose between science and religion since they do not offer compatible ways of thinking.

A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



60. In order to be extremely successful, a person usually must sacrifice most of his happiness.

A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



61. In this world of hostile governments and alien beliefs a person would do well to mind his own business and let others do the same.

A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



62. When a person knows that you oppose his beliefs, he probably will not talk about those beliefs accurately when you are near.

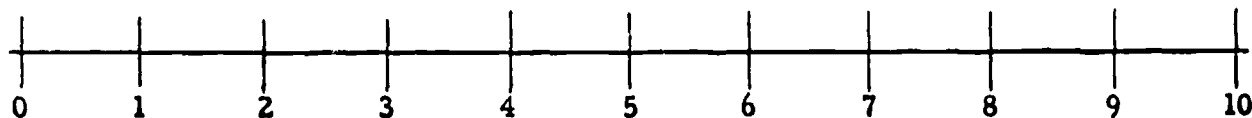
A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



63. I often fear that I am not prepared to fight life's battles.

A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



64. Rapists and prostitutes are usually the least intelligent members of any society.

A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



65. Ours is not to reason why, ours is but to do or die.

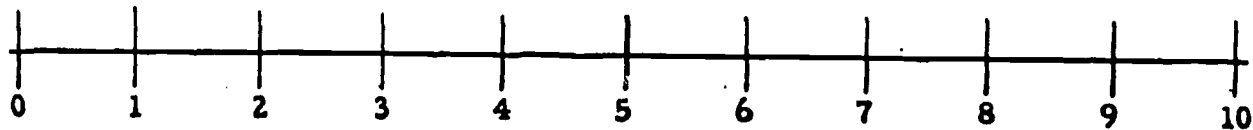
A. AGREE

B. DISAGREE

Weakly

Moderately

Strongly



APPENDIX VI

WILSON COUNTY COMMUNITY ANALYSIS
STUDY

Occupational Education Center
North Carolina State University
Raleigh, North Carolina

WILSON COUNTY COMMUNITY ANALYSIS STUDY

Occupational Education for Areas in
Economic Transition
A Total Community Approach
Project 6

Occupational Education Center
North Carolina State Univ.
Raleigh, North Carolina

HOUSEHOLD
SCHEDULE

Schedule Number _____

Map Number _____

County _____

City or Community _____

Interviewer _____

	First Visit	Second Visit	Third Visit
Date:	_____	_____	_____
Time:	_____	_____	_____
Result:	_____	_____	_____

SCHEDULE PREPARED

OCTOBER, 1966

151

[illegible]

173

Household Composition - First, I would like to ask you a few questions about your household.									
Enter all Responses to questions 1 - 17 in the appropriate spaces above.									
1.	May I have your name please?								
2.	How old are you?								

1. May I have your name please?
2. How old are you? (Age as of last birthday)
3. What is your marital status? (That is, are you married, single, divorced, widowed or separated?)
4. Who is the head of the household? (Write in head after the correct name)
5. What is your relationship to this person?
6. What is his/her age?
7. What is her/his marital status?
8. What kind of work does he/she do?
9. What is his/her annual income?
10. What kind of work do you do?
11. What is your income?
12. What is the last grade of school completed by the head of the household?
13. What is the last grade of school completed by you?
14. Do you have any children? (If no, go to question number 26)
15. May I have their names, please. (List names of all children in chart.)
16. What are the grade levels of the children who are in school? (list grade levels in chart.)

Name	Present Age	Grade Upon Leaving School	Reason for Leaving	Present Address City State	Occupation

School Dropout - May I have some information about the children who have dropped out of school?

18. Do you have any children who have dropped out of school in the last ten years?

Yes (Fill in responses to questions 19 - 24 in the appropriate space above.)

No (Go to question 26.)

19. What are the names of the children who have dropped out of school?

20. What are the present ages of the children who have dropped out of school? (According to last birthday.)

21. At what age did each child leave school?

22. What grade was each child in when he left school?

23. What are the reasons why each child left school? (Probe for separate or different reasons for each child.)

24. What is the present address of each one of the children who has dropped out of school?

25. May I have the occupation of each child. (If unemployed, please indicate above under occupation column.)

Interviewer's Comments:

26. Are you renting or do you own your home?

_____ Renter

_____ Owner (Go to question number 28.)

27. How much rent are you paying?

_____ Per week

_____ Per month

(Go to question number 32.)

28. Do you own your home outright? (That is, there are not payments due on it at present.)

_____ Yes (Go to question number 31.)

_____ No

29. What are your monthly payments? _____

30. What is the total balance which you owe on your home now? _____

31. How much did this home cost? _____

JOBS AND JOB TRAINING

Now, I would like to ask you a few questions about the job needs of this community.

32. Are you looking for work at present?

_____ Yes

_____ No (Go to question number 35.)

_____ Refused to answer (Go to question 35.)

33. What kind of work are you trying to find? _____

34. What is the reason that you do not have a job now? _____

35. Are any members of your family looking for a job now?

_____ Yes

_____ No (Go to question number 38.)

_____ Don't know (Go to question number 38.)

36. What kind of work is he or she trying to find?

37. What is the reason why this person does not have a job? _____

38. Are there any jobs available in this community that an individual could get if he had the necessary training?

_____ Yes

_____ No

_____ Don't know

39. What are the jobs available in this community for which individuals need to be trained?

40. Is there any place in this community where an individual can get job training?

_____ Yes

_____ No (Go to question number 42.)

_____ Don't know (Go to question number 42.)

41. Where can an individual in this community go to get job training?

JOB OUTLOOK

Now, I would like to ask you a few questions about your job hopes and aspirations.

42. Of all the jobs available to different individuals, which one would you like to have most?

43. What is your major reason for wanting this job above all the others?

44. If you were to go in search of this job tomorrow, how would you go about finding it?

45. Are the public schools preparing the youth of this community for the jobs which are available?

☐ Yes

☐ No

☐ Don't know

46. What are some of the things which the schools are doing to prepare the youth of this community for job opportunities?

47. In what ways are the schools failing to prepare the youth in this community for job opportunities?

48. Are there any adult education programs being offered in this area?

☐ Yes

☐ No (Go to question number 50.)

☐ Don't know (Go to question number 50.)

49. Where are these programs being offered at present?

50. Are there any vocational training programs in this area?

_____ Yes

_____ No (Go to question number 52.)

_____ Don't know (Go to question number 52.)

51. Where as these vocational training programs being offered at present?

52. Are you planning to take any adult or vocational educational courses within the next year?

_____ Yes

Which one(s) _____

_____ No

_____ Undecided

53. Would you be willing to leave this area to find another job?

_____ Yes

_____ No

comments _____

54. What is the worst possible job at which you would consider working?

55. What work seems easiest to get in this community?

56. What work seems hardest to get in this community?

57. What new kinds of work would be most helpful to have in this community?

58. What new kind of worker would be most helpful to have in Wilson/County?

MIGRATION - I would like to ask some questions about moving.

59. How long have you lived at the present address? _____
 60. Where did you live before you moved here? _____

City, Town, Township _____ County _____ State _____

61. What were your reasons for moving to the present address?

a. _____

b. _____

62. What are the names of the places where you have lived in the last ten years?

City _____ County _____ State _____ Date _____

City _____ County _____ State _____ Date _____

City _____ County _____ State _____ Date _____

City _____ County _____ State _____ Date _____

63. Have any members of your immediate family moved in the last ten years? _____ Yes (Fill in chart.)
 _____ No (Go to question number 70.)

Name	Relationship to respondent	Age Moved	Year Moved	Highest Grade of school completed	Present Address City State	Reason for Moving	What type of work is he doing?

64. What is the relationship of this person to you?

65. What is the age of this individual?

66. What year did he leave?

67. What was the last grade which this person completed in school?

68. What is his present move?

69. Why did this person move?

Interviewer's comments:

COMMUNITY PERCEPTIONS

Now, I would like to ask you a few questions about the services in the community.

70. Are the services of the police department adequate in this community?

☐ Yes

☐ No

☐ Don't know

comments _____

71. Are the services of the fire department adequate in this community?

☐ Yes

☐ No

☐ Don't know

comments _____

72. Does the local government perform its duty as it should?

☐ Yes

☐ No

☐ Don't know

comments _____

73. Does the local Public Welfare Department do its best?

☐ Yes

☐ No

comments _____

74. Are the local schools meeting the needs of the children in this community?

☐ Yes

☐ No

comments _____

EXPOSURE TO INFORMATION

Now, I would like to ask you some questions about how you get information.

75. How do you generally learn about national events? (Use chart for question numbers 75 - 79.)
76. How do you generally learn about international events?
77. How do you generally learn about North Carolina events?
78. How do you generally learn about Wilson County events?
79. How do you generally learn about neighborhood events?

	T.V.	Radio	Newspaper	Church	Neighbors	Rela- tives	Other	Don't Ask
National Events								
International Events								
North Carolina Events								
Wilson County Events								
Neighborhood Events								

80. How many books have you read in the past year?

___0, ___1, ___2, ___3, ___4, ___5, ___More

81. What types of books have these been?

___Mystery ___History ___School Books ___Religious Books ___Other

82. What types of magazines have you read in the last month?

_____	_____
_____	_____
_____	_____

83. What are your favorite television programs?

_____	_____
_____	_____
_____	_____

84. What are your favorite radio programs?

_____	_____
_____	_____
_____	_____

85. Do you read the newspaper?

___Yes

___No (Go to question number 87.)

86. What section of this newspaper do you read first? _____)

second? _____)

third? _____)

87. When you really want to find out about something what do you generally do?

88. If you have a personal problem which is upsetting you to whom do you go for advice?

89. If you found yourself in serious trouble how would you go about getting help?

90. What are the greatest problems facing mankind today?

91. What do you think should be done about these problems?

COMMUNITY LEADERSHIP.

Now, I would like to ask you a few questions about the leaders of this community.

NOTE: Respondent's clear understanding of the first question is essential! Probe carefully if necessary using the terms "group" or "some men" as well as "crowd."

COMMUNITY LEADERSHIP

Now, I would like to ask you a few questions about the leaders of this community.

NOTE: Respondent's clear understanding of the first question is essential! Probe carefully if necessary using the terms "group" or "some men" as well as "crowd."

1. Some people say there is a "crowd" of men here in the City of Wilson/ Wilson County who pretty well make important decisions about city/county affairs. Do you agree?

_____ Yes

_____ No

_____ Other

comments _____

2. Will you give me the names of some of the people in the City of Wilson/ Wilson County you think have a lot of influence in important decisions about city/county affairs.

<u>Name</u>	<u>Position</u>	<u>Race</u>	<u>Sex</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

3. Of these people you have named, who do you think is most influential?
(Place "a" to denote most influential, "b" second, and "c" to denote
third rank for the names listed in question 2.)

_____ Don't know

4. In many cities/counties, there are two or more crowds of influential
people who disagree with each other about important city/county affairs.
Do you believe such a situation exists in the City of Wilson/Wilson County?

_____ Yes

_____ No (Go to question number 7)

_____ Other

comments _____

5. Will you please name the groups and the group leaders who sometimes
disagree with each other about important city/county affairs?

A. _____ Group

	Name	Position	Race	Sex
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____

B. _____ Group

	Name	Position	Race	Sex
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____

C. _____ Group

	Name	Position	Race	Sex
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____

6. Do you think the people you have named above usually take part in city/county affairs for their own self-interest, or do you think they are really interested in the welfare of your city/county?

_____ self-interest

_____ welfare of people in the city/county

_____ other

comments _____

7. If you could make a suggestion to the most influential persons in your city/county, what big problems would you like to see them work on?

1) _____

Any others?

2) _____

Any others?

3) _____

8. Do you think religious leaders are influential in important city/county affairs today?

_____ Yes

_____ No (Go to question number 11)

_____ Other

comments _____

9. Will you name some of the most important religious leaders in the city/county?

	Name	Position	Race	Sex
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____

10. Of these people you have named as religious leaders, who is most important? Second? Third? (Use "a" to denote most influential, "b" to denote second most influential or "c" to denote third.)

_____ Don't know

11. Who do you think are the most important educational leaders in the city/county?

	Name	Position	Race	Sex
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____

NOTE: For ranking most important, place "a" beside the name, "b" to denote second most important and "c" the third most important.

_____ Don't know

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12. Do you think there are women in the City of Wilson/Wilson County who are influential in important city/county affairs?

_____ Yes

_____ No (Go to question number 14)

_____ Other

comments _____

13. Will you please name some of the most influential women in your city/county?

	Name	Position	Race
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____

NOTE: Ask, who do you think is most important, second, and third most important. Mark "a" beside "most", "b" beside "second" and "c" beside "third."

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PARTICIPATION IN ORGANIZATION

14. Now, I would like to ask about the groups and organizations to which you belong.

Go down the list of organizations and ask if respondent belongs to any organization of that type. If he belongs to an organization, list it and check the characteristics of their attendance that apply.

Do you attend:

Farm organizations
Extension organizations
Service or Civic clubs
Patriotic groups
Fraternal orders
Professional organizations

Labor unions
Parent teacher association
Church
Sunday School
Other church organizations
Others

Name of organizations to which respondent belongs	Officer or Committee Member (yes or no)	How often attends meetings wky.mny.annually	How often meetings held wky. mny. annually	Office use only	
				% attended	scale score
TOTAL					

APPENDIX VII

OUTLINE OF THE FIELD MANAGER'S WORK

Effective: Friday 17 March 1967 through and including Friday 7 April 1967.

Hours: 9:00 AM to 5:00 PM Weekdays (Mondays through and including Saturdays) Lunch Hour 12:00 noon to 1:00 PM daily.

Location: Room 104-B Caldwell Hall, Atlantic Christian College, Wilson, North Carolina. Phone: 237-3161 ext. 71.

Duties: To maintain the Wilson, North Carolina, field headquarters of the Center for Occupational Education, Project II, for the duration of field interviewing work in Wilson County. Duties include answering phone calls from Project II staff members, including field interviewers; collecting and distributing materials necessary for the successful completion and of the field interviewing; being available with a car or information to respond to distress or other calls from field interviewers; the mapping and re-assignment of sampling areas due to unforeseen contingencies arising from field interviewing; keeping an accurate record of personal travel and expenditures while on Project II business; and to maintain harmonious relations with and among the personnel of Project II and the residents of Wilson County.

Reimbursement: For the successful completion of this work a flat fee of \$200 will be paid, or a fee of \$10.52631/day for each day of successful completion of this work, on the first North Carolina State University pay period following the termination of this work.

All travel by private automobile necessitated by Project II work during the effective dates of this job will be reimbursed at a rate of \$.08/mile. The obligation for keeping a record of this mileage rests with the field manager. The Center of Occupational Education reserves the right to accept or reject all such travel claims at its discretion.

All lunch (noon meal) expenses will be reimbursed at figure not to exceed \$1.50/day. In all instances only the exact amount of the expenditure will be reimbursed provided that this figure does not exceed \$1.50/day. The obligation for keeping a record of these lunch expenditures rests with the field manager.

No reimbursement for personal expenditures will be made except as specified under the foregoing conditions and rates of payment. Only by written authorization of a full-time staff member can the field manager make expenditures not already covered here.

The Center for Occupational Education of the North Carolina State University at Raleigh, North Carolina, reserves the right to cancel this job at any time before its natural termination by notifying the field manager of such and reimbursing same for all expenditures made in accordance with the terms of the job up to the point of notification of cancellation.